



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
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No. 49] NEW DELHI, SATURDAY, DECEMBER 5, 1992 (AGRAHAYANA 14, 1914)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएँ और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

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Calcutta, the 5th December 1992

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5th, 6th and 7th Floor,  
234/4, Acharya Jagadish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

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**पेटेंट कार्यालय**

**एकस्व तथा अभिकल्प**

कलकत्ता, दिनांक 5 दिसम्बर 1992

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ते में अवस्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेट,  
तीसरा तल, लोअर परले, (पश्चिम).  
बम्बई-400013 ।

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य  
क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा  
दिव एवं दादरा और नागर हवेली ।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,  
एकक सं. 401 से 405, तीसरा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110005 ।

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर,  
पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों  
एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली ।

तार पता—“पेटेंटोफिक”

पेटेंट कार्यालय शाखा,  
61, वालाजाह रोड,  
मद्रास-600002 ।

आन्ध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य  
क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप  
मिन्निकाय तथा अमिनिदिव द्वीप ।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय)  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय,  
भवन, 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700020 ।

भारत का अवशेष क्षेत्र

तार पता—“पेटेंट्स”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपे-  
क्षित सभी आवेदन पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट  
कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क :—शुल्कों की अदायगी या तो नकद की जाएगी अथवा  
उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा  
डाक आदेश या जहां उपयुक्त कार्यालय अवस्थित है; उस स्थान  
के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट  
अथवा चेक द्वारा की जा सकती है ।

**CORRIGENDUM**

In the Gazette of India, Part III, Sec. II dated 15th January, 1983, Page 34, Col. 2 under heading 3 claims for Compl. specn. No. 150927(55/Bom/80) filed March 7, 1980 delete said protective cover of the said stationary grinding stone from line 33 & 34.

In the Gazette of India Part III, Sec. 2, dated 15th April, 1989 under the heading compl. specn. accepted in page 369, Col. 2, for 164575 read the application No. 458/Cal/86 instead of 58/Cal/86.

In the Gazette of India, Part III, Sec. 2, dated the 11th August 1990 in page 887, Col. 1, for application for Patent No. 61/Mas/86 filed on 29th January 1986 read the applicant as SOBREVIN SOLIETE OE BREVETS INDUS-TRIELS-ESTABLISSEMENT instead of SOBREVIN SOCIETE DE DREVETS INDUSTRIELS-ESTABLISSE-MENT.

In the Gazette of India, Part III, Sec. 2, dated the 23rd March, 1991 for Accepted complete specification No. 168386 read the dated as 13-2-1989 instead of 5-4-89.

**THE PATENT OFFICE**

Calcutta, the 5th December 1992

**APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20**

The dates shown in the crescent branch are the dates claimed under Section 135, of the Patents Act, 1970.

26th October, 1992

782/Cal/92. Hoechst Aktiengesellschaft. Water-soluble fiber reactive dyes, processes for their preparation and their use.

783/Cal/92. Clark-Rediance Corporation. Microwave based point Liquid Level Monitoring system.

784/Cal/92. Siemens Aktiengesellschaft. Method of joining contact facings to a contact carrier by hard soldering and semifinished product for use in said method.

785/Cal/92. Nukem GmbH. Method and device for cleaning in particular of disco-shaped oxide substrate. (Divided out of No. 815/Cal/88; antedated to 03-10-1988).

786/Cal/92. Jacobs Brake Technology Corporation. Master piston for a Compression Release Engine "Retarder".

787/Cal/92. Jacobs Brake Technology Corporation. Self-Clipping Slave piston.

27th October, 1992

788/Cal/92. Healtech S.A. Process and machine for the univocal pairing of radiographic, ecographic, tomographic, angiographic, of nuclear magnetic resonance documents and, in general, of all those documents that originate from diagnostic procedures that produce medical reports by photographic exposure, with a given patient.

789/Cal/92. Himont Incorporated. Phosphorous organic amides suitable as stabilizers and polymer compositions which comprise them.

790/Cal/92. E.I. Du Pont De Nemours and Company. Compositions of Difluoromethane and Tetrafluoroethane.

791/Cal/92. Merck Patent Gesellschaft. mit beschränkter Haftung Pigments of improved lustre.

792/Cal/92. Trutan Pty. Limited. Improvements in three-dimensional imagery.

28th October, 1992

793/Cal/92. Taubmans Proprietary Limited and John Ly-saght (Australia) Limited. Solventless Coating. (Convention Nos. are PK 9193 & PL 3383 Dated are 29-10-1991 & 07-07-1992. both are Australia).

794/Cal/92. ABB Henschel Waggon Union GmbH. Running Gear for Drop-Frame rail Vehicles.

795/Cal/92. Hans Oetiker AG Maschinen-und Apparate-fabrik Oberdorfstrasse. Clamp Structure.

29th October, 1992

796/Cal/92. Dr. Mrs. Kalyani Sen and Bose Institute. Process for the production of a new Dapside dye from Bio-Mass.

797/Cal/92. Siemens Aktiengesellschaft. Vacuum Switch having a drive device and a pole drive unit.

798/Cal/92. CO<sub>2</sub>Pac Limited. A Container.

30th October, 1992

799/Cal/92. Samwha Engineering Co. Ltd. Hoist Controller.

800/Cal/92. Dr. Swati Ray of Energy Research Unit, Indian Association for the Cultivation of Science. Preparation of diamond like carbon film by Photo-CVD technique.

801/Cal/92. Kortec Ag. Method and Apparatus for protecting an injection device disposed in a hot blast conduit of a blast furnace.

2nd November, 1992

802/Cal/92. Siemens Aktiengesellschaft. Rolling Schedule Computing method.

803/Cal/92. Hitachi Construction Machinery Co. Ltd. Hydraulic Drive System for construction machine.

804/Cal/92. E.I. Du Pont De Nemours and Company. Hydrogenation of Enzymatically-Produced Glyoxylic Acid/Aminomethylphosphonic Acid Mixtures.

805/Cal/92. Texaco Development Corporation. Combined Power Cycle with Liquefied Natural Gas (LNG) and synthesis of fuel Gas.

806/Cal/92. E.I. Du Pont De Nemours and Company. Enzymatic Preparation of N-(Phosphonomethyl) Glycine.

## ALTERATION OF DATE UNDER SECTION 16

171660 Ante-dated to 9th September 1987.

(739/Cal/1989)

171689 Ante-dated to 19th December, 1986.

(692/Mas/92)

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15 of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

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Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अधिक ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र 14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकत्र को ऐसे विरोध की सूचना विहित प्रपत्र 15 पर दे सकते हैं। विरोध संबंधी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथा विहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

“प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अंतर-राष्ट्रीय वर्गीकरण के अनुरूप हैं।”

नीचे सूचीगत विनिर्देशों की सीमित संख्यक मुद्रित प्रतियां, भारत सरकार बूक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथा समय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु. है। (अतिरिक्त आक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग-पत्र के साथ निम्नलिखित सूची में यथा प्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियां यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय स पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेखों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु. है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Cl. : 150 F, G, C 151 C, D, G

171651

Int. Cl.<sup>4</sup> : F 16 L 13/00, 25/00, 33/00, 39/00.

METHOD OF MANUFACTURING A CONNECTING PIECE FIXED TO A PRODUCT MADE OF A COMPOSITE MATERIAL.

Applicant : EXEL OY. OF LARKISEPANKUJA 5, 00620 HELSINKI, FINLAND. AND RAUMA-REPOLA OY. OF SNELLMANNINKATU 13, 00170 HELSINKI, FINLAND.

Inventors : (1) ILKKA KIVI  
(2) TAPIO MANNER  
(3) KARI KUVAJA  
(4) JORMA TERAVA.

Application No. 842/Cal/88; filed on October 12, 1988.  
Appropriate Office for opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 6 Claims

Method of manufacturing a connecting piece (13) fixed to a product (1) made of a composite material, characterized in that, the connecting piece (13), comprises a piece forming a shoulder (12) within the joint area (D) and that simultaneously with the manufacture of the product (11), the reinforcing fibres (22) that proceed in the longitudinal direction (A) of the product (11) are guided within the joint area (D) so as to run along a turning path (B) of movement so that the reinforcing fibres (22) turn around said shoulder (21) and return in the opposite direction (C) of progress as unified continuous fibres, whereby, at the same time, both said product (11) of composite material and the joint (15) with the connecting piece (13) are formed.

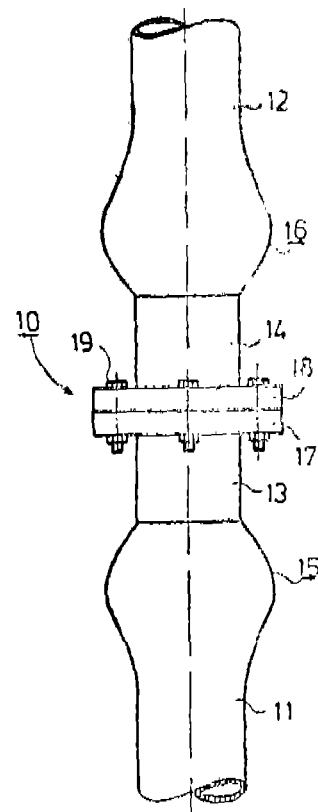


Fig. 1

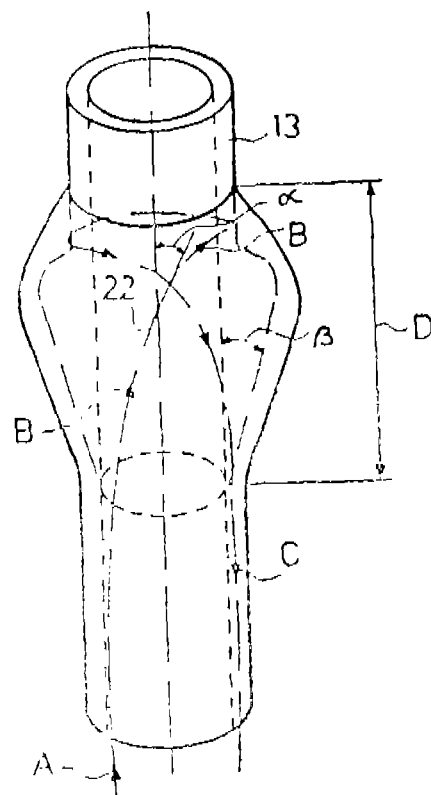


Fig. 3

Int. Cl. : C 04 B 33/00, 35/00, 38/00.

"METHOD OF PRODUCING METAL MATRIX COMPOSITE."

**Applicant : LANXIDE TECHNOLOGY COMPANY, LP.**  
of Tralce Industrial Park Newark, Delaware 19711 U.S.A.

**Inventors : (1) RATNESH KUMAR DWIVEDI  
(2) VIRGIL IRICK (JR.)**

Application No. 06/Gal/1989; filed on 2nd January 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 24 Claims

A method of producing a metal matrix composite as described herein, comprising:

(a) forming a substantially impervious mold by the steps comprising :

(1) providing a permeable preform comprised of a first filler material as described herein having therein a cavity comprising at least one shaped cavity wall and optionally at least one opening at an exterior surface thereof;

(ii) contacting a molten parent metal, as described herein, with said preform and with an oxidant, as described herein, to react molten parent metal with said oxidant to form an oxidation reaction product as described herein, within a temperature range, as described herein, extending from a temperature above the melting point of said parent metal to a temperature below the melting point of said oxidation reaction product;

(iii) maintaining at least a portion of said oxidation reaction product in contact with and extending between said molten parent metal and said oxidant to progressively draw molten parent metal through the oxidation reaction product towards the oxidant and into said reform so that the oxidation reaction product continues to form within said reform at the interface between said oxidant and previously formed oxidation reaction product;

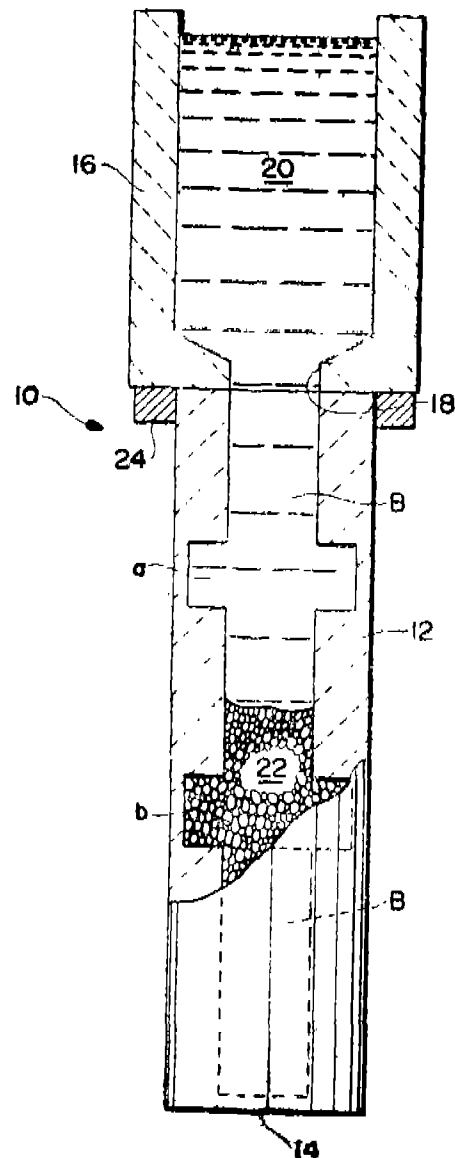
(iv) containing said oxidation reaction within said temperature range to embed at least a portion of said preform within said oxidation reaction product by growth of the oxidation reaction product to thereby provide an impervious mold with said cavity and optionally at least one opening; and

(v) removing at least a portion of excess metal from said cavity which has not reacted with said oxidant to form oxidation reaction product;

(b) **emplacing a permeable mass of a second filler material within said cavity of said impervious mold, and contacting said mass of second filler, as described herein, within at least one molten metal selected from the group consisting of aluminum and magnesium, said mass of second filler material optionally contacting said molten metal through said at least one opening;**

(c) hermetically sealing the mold contents for a period of time sufficient to spontaneously infiltrate said mass of second filler said at least one molten metal; and

(d) upon completion of step (c), solidifying said at least one molten metal to provide said metal matrix composite.



(Compl. secn. 57 pages.

Drgs. 4 sheets)

CL : 32 F 3 (c)

171653

Int. Cl. : C 07 C 37/00, 37/52, 39/42.

"PROCESS FOR PRODUCTION OF BISPHENOL A."

Applicant INSTYTUT CIEZKIEJ SYNTEZY ORGANIC-  
NEJ "BLACHOWNIA", OF KEDZIERZYN-KOZLE,  
POLAND, AND ZAKLADY CHEMICZNE "BLACHOW-  
NIA", OF KEDZIERZYN-KOZIE, POLAND.

Inventors : (1) EDWARD GRZYWA PROF. DR.

- (2) MACIEJ KIEDIK DR.
- (3) JOZEF KOLT,
- (4) ADAM MAZUR,
- (5) JERZY MARSZYCKI,
- (6) EUGENIUSZ ZAJAC,
- (7) ANNA RZODECZKO,
- (8) JERZY CZYZ,
- (9) KAZIMIERZ TERELAK,
- (10) ZBIGNIEW SWIDERSKI,
- (11) TEODOR BEK.

Application No. 36/Cal/89; filed on 12 January 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 8 Claims

A process for the production of bisphenol a from phenol and acetone, which comprises introducing a substantially anhydrous reaction mixture of phenol, acetone, and recycled solution of bisphenol A and reaction byproducts in phenol into a reaction zone containing a cation-exchange resin catalyst, said catalyst, being a mixture of resin having a macroporous structure and in a ratio of 0.05 : 1 to 0.5 : 1 by weight, the mol ratio of phenol to acetone being 5 : 1 to 30 : 1, the concentration of bisphenol A being 12 to 20 per cent by weight; maintaining the temperature of the reaction zone between 60 degrees and 95 degrees C; withdrawing the resulting reacted reaction mixture from the reaction zone, the concentration of bisphenol a being 21 to 35 per cent by weight, the amount of reaction by-products being 12 to 24 per cent by weight; and treating such withdrawn reaction mixture to recover bisphenol A product and to provide the recycled solution of bisphenol A and reaction by-products in phenol.

(Compl. specn. 18 pages.

Drgs. Nil)

Cl. : 127 B

171654

Int. Cl. : F 16 C 3/00.

"AN ASSEMBLED SHAFT AND A PROCESS FOR PRODUCING THE SAME."

Applicant : EMITEC GESELLSCHAFT FUR EMIS-  
SIONS TECHNOLOGIE MBH. OF HAUPTSTRASSE 150,  
D-5204 LOHMAR 1, WEST GERMANY.

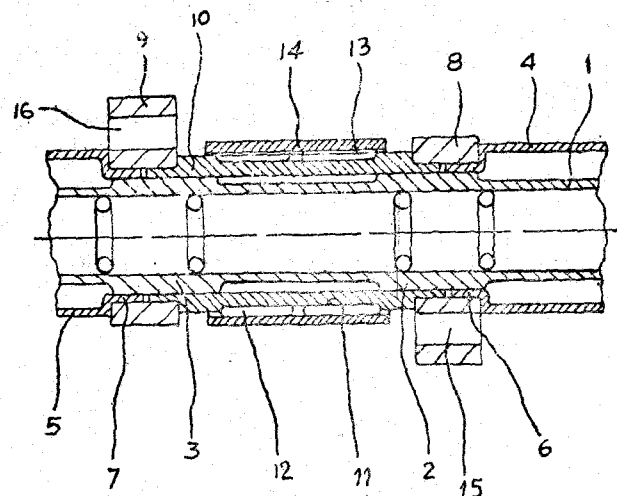
Inventor : HELMUT SWARS.

Application No. 77/Cal/89; filed on 24th January, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 10 Claims

An assembled shaft comprising a tubular member and driving or coupling elements attached to it, especially camshafts or driveshafts characterised in that roller bearings with at least an undivided outer bearing race are finish-assembled in bearing regions between driving and coupling elements and that the driving or coupling elements are fixed by hydraulically expanding the inside of the tubular member in portions apart from the bearing regions.



(Compl. specn. 6 pages.

Drgs. 1 sheet)

Cl. : 29 A

171655

Int. Cl. : G 06 F 3/14, 15/00.

"GRAPHIC DISPLAY SYSTEM".

Applicant : YOKOGAWA ELECTRIC CORPORATION  
OF 2-9-32 NAKACHO, MUSASHINO-SHI, TOKYO,  
JAPAN.

Inventor : KENICHI INOUE.

Application No. 151/Cal/1989; filed on 21st February 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 2 Claims

A graphic display system comprising a plurality of graphic units :

a host processor; and

a common bus;

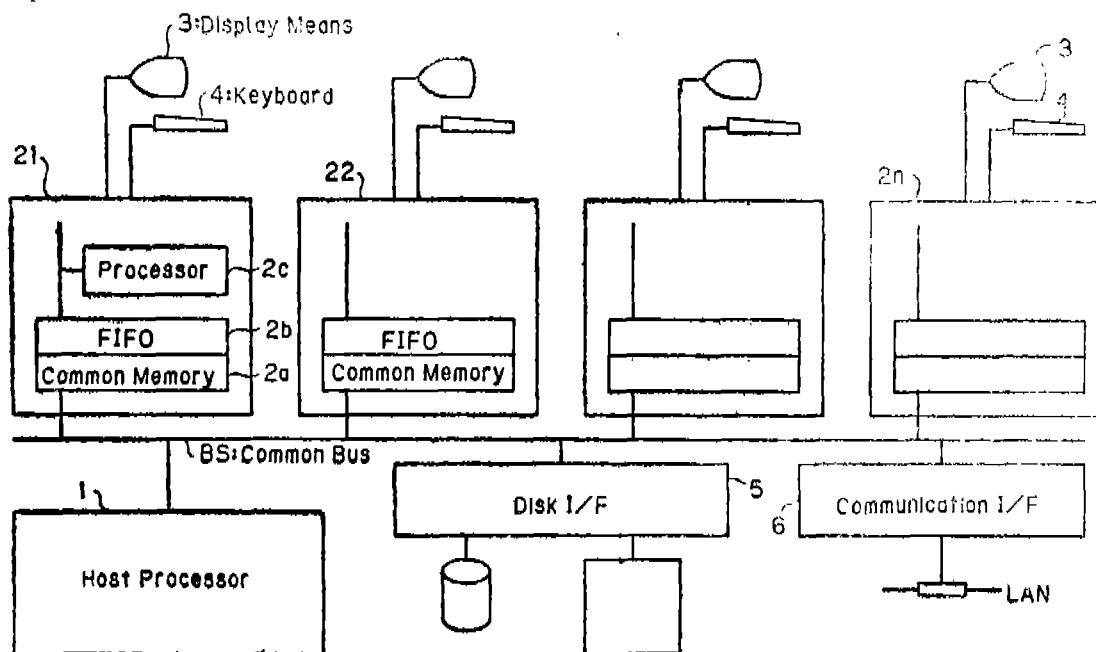
said plurality of graphic display units being connected to said host processor via said common bus, wherein each of said plurality of graphic display units comprises an internal bus; and

a common memory comprising a single FIFO buffer or a plurality of FIFO buffers, said common memory having two ports, one of said ports being connected to said common bus, and another of said ports being connected to said internal bus, wherein said single FIFO buffer is or said plurality of FIFO buffers are used for sequential first in first out transmission of a plurality of commands or information from said host processor and wherein said single FIFO buffer is optionally associated with an internal processor coupled to said internal bus and functioning as a command output means;

a plurality of frame buffers, a plurality of controllers coupled to said internal bus and to said plurality of frame buffers for placing a command train from

said FIFO buffer in said plurality of frame buffers in accordance with commands given from said internal processor and for reading said command train,

and a color look-up table responsive to video data outputted from said frame buffers for outputting data to a display means.



Compl. specn. 37 pages.

Drgs. 14 sheets.

: 55 E 4.

171656

Cl.: A 61 K 39/12.

A PROCESS FOR THE PRODUCTION OF ANTIGENIC HBV PARTICLES.

Applicant: PHILLIPS PETROLEUM COMPANY OF BARTLESVILLE, STATE OF OKLAHOMA, UNITED STATES OF AMERICA.

Inventors: GREGORY PATRICK THILL.

Application No. 298/Cal. 1989; filed on 19th April 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972) Patent Office, Calcutta.

9 Claims

A process for the production of antigenic HBV particles comprising:

(a) transforming a methylotrophic yeast with at least one vector having at least one expression cassette containing a structural gene for *pres<sub>0</sub>*, operably linked to a regulatory region and a 3' termination sequence; and thereafter

(b) culturing the resulting transformed yeast strain under suitable conditions to obtain the production of said HBsAg *pres<sub>0</sub>* protein.

Compl. Specn. 36 pages

Drgns. 4 sheets.

Cl.: 102 B

171657

Int. Cl.: F 15 B 15/00.

HYDRAULIC DRIVING APPARATUS FOR A HYDRAULIC MACHINE. OF

Applicant: HITACHI CONSTRUCTION MACHINERY CO., LTD. OF 6-2, OHTEMACHI-2-CHOME, CHIYODA-KU-TOKYO, JAPAN.

Inventors: (1) TAICHI HIRATA, (2) KUNIAKI YOSHIDA, (3) HIDEAKI TANAKA, (4) GENROKU SUGIYAMA, (5) MASAKAZU HAGA.

Application No. 313/Cal. 1989; filed on 24th April 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972) Patent Office, Calcutta.

6 Claims

A hydraulic driving apparatus for a hydraulic machine comprising a plurality of hydraulic actuators, a plurality of control valves arranged correspondingly respectively to said plurality of hydraulic actuators for controlling at least flow rate of hydraulic fluid supplied to each said plurality of hydraulic actuators from a source of hydraulic fluid, and operating-lever devices arranged correspondingly respectively to these control valves, for outputting operational signals for operating the respective control valves, wherein said hydraulic driving apparatus comprising:

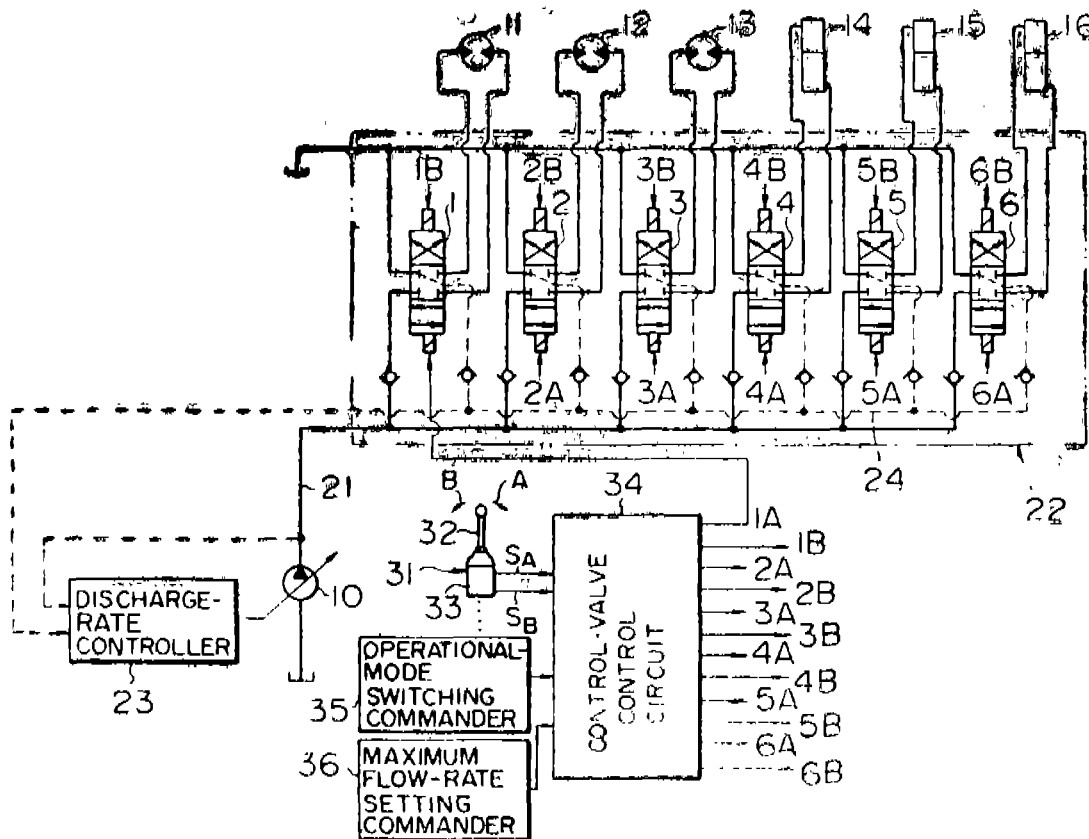
operational-mode switching command means for outputting command signal for altering operational modes of at least one of the said hydraulic actuators to a first mode that is normal operational-speed characteristics for special working.

second-mode setting command means for outputting a setting command signal for setting the second mode of said plurality of hydraulic actuators; and

control means having inputted thereto the operational signal outputted from said operational-lever devices, the switching command signal outputted from said operational-mode switching command means for the setting command signal outputted from said second-mode setting command means, said control means setting said second mode with respect to at least one

of said plurality of hydraulic actuators, on the basis of said setting command signal, and said control means outputting control signals with respect to the corresponding control valves

in order to operate said hydraulic actuators in said first mode or said second mode on the basis of said switching command signal and said operational signals



Compl. specn. 32 pages.

Drgns. 5 sheets.

Cl.: 102 D.

171658

Int. Cl.: F 15 B 21/00; F 15 C, 3/00.

### VALVE APPARATUS.

Applicant: HITACHI CONSTRUCTION MACHINERY CO. LTD. OF 6-2, OHTEMACHI 2-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventors: (1) GENROKU SUGIYAMA, (2) TOICHI HIRATA, (3) HIDEAKI TANAKA, (4) KAZUMASA YUASA, (5) YUSAKU NOZAWA.

Application No. 314/Ca/89; filed on 24th April 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972) Patent Office, Calcutta.

### 10 Claims

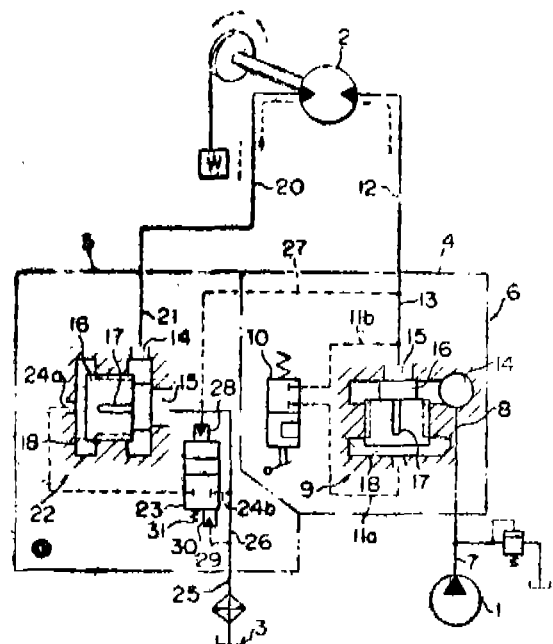
A valve apparatus (6) mounted to a hydraulic machine comprising a hydraulic pump (1) and a hydraulic actuator (2) driven by hydraulic fluid discharged from the hydraulic pump, for controlling driving of said actuator, comprising;

a meter-in circuit (4) for introducing the hydraulic fluid discharged from said hydraulic pump (1), into said actuator (2); and

a meter-out circuit (5) for introducing return fluid from said actuator, into a tank (3);

said meter-out circuit being provided with a main valve (27) for controlling the return fluid from said actuator, a pilot circuit (24a, 24b) including variable restrictor means (23).

said main valve being closed when said pilot circuit is closed, said main valve having an opening degree varied depending upon an amount of restriction of said variable restrictor means, and control means (27-31) for varying the amount of restriction of said variable restrictor means in accordance with driving pressure of said actuator.



Compl. specn. 34 pages.

Drgns. 8 sheets.



Cl.: 194 C 2 (b)

171659

Int. Cl.: H 01 J 29/84.

IMPROVED METHOD FOR THE MANUFACTURE OF CATHODE-RAY TUBES.

Applicant: RCA LICENSING CORPORATION OF TWO INDEPENDENCE WAY PRINCETON, NEW JERSEY 08540, UNITED STATES OF AMERICA.

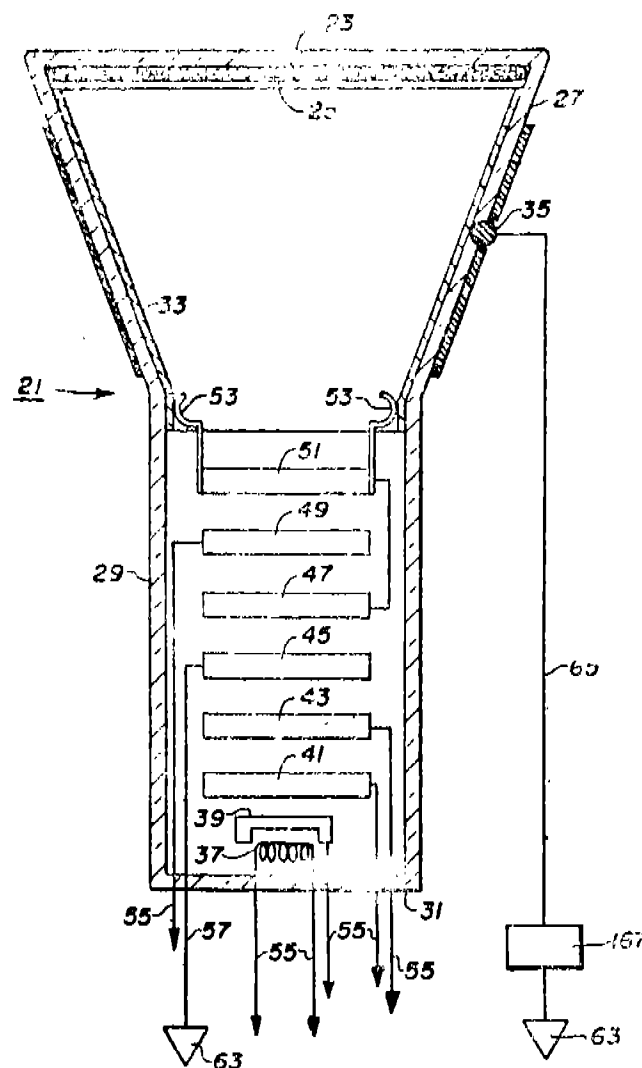
Inventor: KARL GERHARD IERNQVIST.

Application No. 380/Cal/89; filed on 17th May 1989;

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972) Patent Office, Calcutta.

### 3 Claims

An improved method for the manufacture of cathode-ray tubes having an electron gun mount assembly comprising a heater, a cathode and six electrodes including a control electrode, at least one screen grid, first and second focus electrodes, and at least one anode, the method comprising spot-knocking the mount assembly in an evacuated tube; wherein the improvement comprises the step of applying a spot-knocking voltage between said first focus electrode and said one or more anodes, with the remaining gun elements [i.e., said heater, said cathode, said control electrode, said one or more screen grids, and said second focus electrode] electrically floating.



Compl. specn. 12 pages.

2-357GI/92

Drgns. 5 sheets

Cl.: 172 F. 34 A, D.

171660

Int. Cl.: D 01 F 11/00.

PROCESS FOR PREPARING A FALSE-TWIST-TEXTURED YARN.

Applicant: E.I. DU. PONT DE NEMOURS AND COMPANY OF WILMINGTON DELAWARE, UNITED STATES OF AMERICA.

Inventor: CECIL EVERETT REESE.

Application No. 739/Cal/1989; filed on 7th September 1989.

(Divided out of No. 722/Cal/87; antedated to 9-9-1987).

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972) Patent Office, Calcutta.

### 1 Claim

A process for preparing a false-twist-textured yarn, wherein a multifilament polyester feed yarn is subjected to simultaneous draw-texturing at a speed of at least 500 mpm, the feed yarn consists essentially of polymerized ethylene terephthalate residues and of trimesate or trimellitate residues acting as a chain brancher, and the resulting package of textured yarn has not more than about 0.5 BFC, and over 20 TYT.

Compl. specn. 30 pages.

Drgns. 1 sheet

Ind. Cl.: 23 E [XL(3)]

171661

Int. Cl.: B 65 D 3/08, 21/04, 37/00.

A FOLDING BOX.

Applicants: AB AKERLUND & RAUSING, A SWEDISH COMPANY, OF BOX 22, 22100 LUND, SWEDEN.

Inventor: HARRY HOLMGREN.

Application No. 559/MAS/87 filed on 4th August 1987.

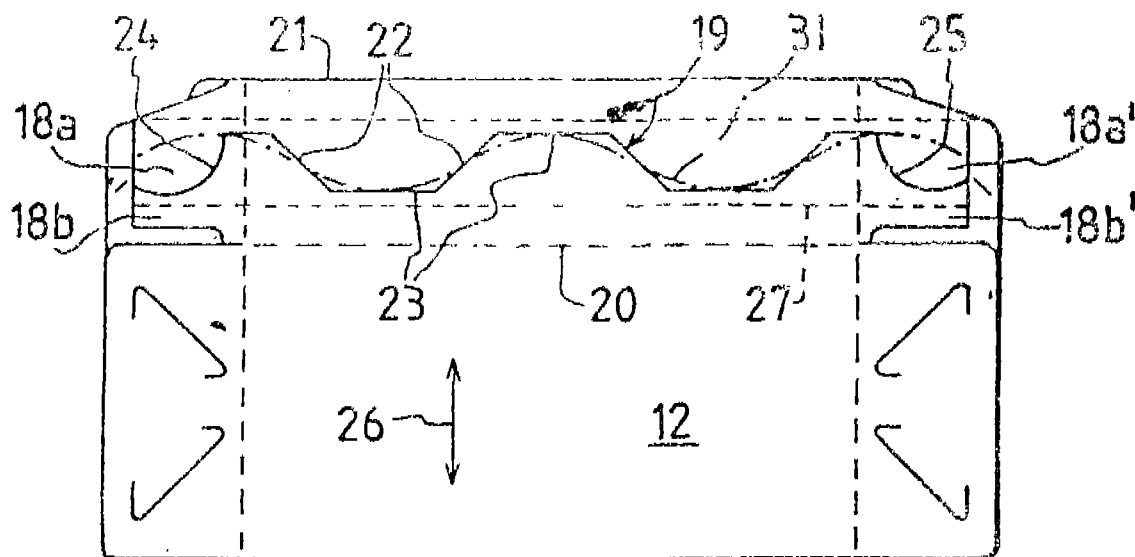
Appropriate Office for the Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

### 5 Claims

A folding box of a material such as cardboard comprising a casing having a line joint (19) and top and bottom end closures and sealing membranes attached to flaps of said end closures characterized in that the line joint (19) of the folding box has an abutting edge joint forming a discontinuous joint

line which has straight subsections (22, 24) being not parallel to the side edges (20, 21) of the folding box and a subsection (23) being parallel to the side edges (20, 21) in the narrow

side wall forming the assembling side and sealing membranes of a flexible material is attached to the top flaps and bottom flaps for covering the folding box cross-section.



(Comp. specn. 8 pages;

Drgs. 2 sheets)

Ind. Cl.: 157 C [L]

171662

6 Claims

Int. Cl.: B 60 M 1/18.

**A.C. SECTIONING INSULATOR ASSEMBLY FOR SEPARATING ADJACENT SECTIONS OF TRACTION LINES.**

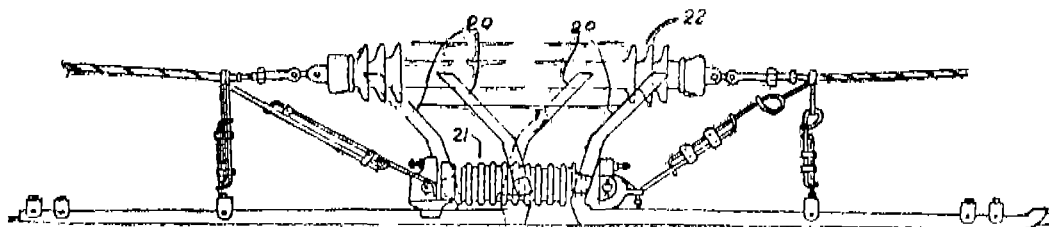
Applicants: W.S. INDUSTRIES (INDIA) LIMITED, AN INDIAN COMPANY, HAVING REGISTERED OFFICE AT PORUR, MADRAS 600 116, TAMIL NADU, INDIA.

Inventor: VENKATRAM SRINIVASAN.

Application No. 381/MAS/88 filed on 3rd June 1988.

Appropriate Office for the Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

An A.C. sectioning insulator assembly for separating adjacent sections of traction line belonging to different elementary electrical sections and for providing a continuous mechanical and electrical path for the passage of pantographs of electrical rolling stock, the assembly comprising section insulator (s) and catenary insulator (s) characterised in that said section insulator having been provided with at least one pair of arcing horns being arranged as to quench standing power arcs initiated by a moving pantograph, the pairs of horns having a diverging angle  $\theta$  and converging angle  $\phi$  to facilitate the quenching action where  $90^\circ \leq \theta \leq 120^\circ$  and  $45^\circ \leq \phi \leq 90^\circ$  and the catenary insulator being longer compared to a known catenary insulator.



Compl. specn. 11 pages;

Drgs. 2 sheets

Ind. Cl.: 32-E [GROUP—IX(1)]

171663

2 Claims (No drawing)

Int. Cl.: C 08 F 210/02.

**PROCESS FOR PREPARING A POLYOLEFIN.**

Applicant: HOECHST AKTIENGESellschaft, OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY.

Inventor: RAINER FRANKE.

Application No. 410/MAS/88 filed on June 16, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

A process for preparing a polyolefin comprising carrying out a homopolymerization of ethylene or copolymerization of ethylene with 0 to 10% by weight, based on the total amount of monomers, of a 1-olefin of the formula  $R^0-CH=CH_2$ , in which  $R^0$  denotes a straight-chain or branched alkyl radical with 1 to 12 carbon atoms in a two stage process, in suspension or in the gas phase at a temperature of 20 to 120°C under a pressure of 2 to 60 bar, in the presence of a mixed catalyst, consisting of component (a), a reaction product of a magnesium alcoholate of the formula

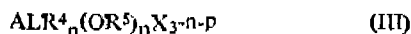


(1)

in which  $R^1$  and  $R^2$  are identical or different and denotes an alkyl radical with 1 to 6 carbon atoms, suspended in an inert dispersing agent such as herein described with a titanium-IV compound of the formula



in which  $R^3$  denotes an alkyl radical with 1 to 6 carbon atoms, X denotes a halogen atom and m is a number from zero to 4, and an organoaluminum compound of the formula



in which  $R^1$  and  $R^2$  are identical or different and denote an alkyl radical with 1 to 12 carbon atoms, X denotes a halogen atom, n is a number from zero to 2 and p is a number from zero to 1 wherein the ratio of the magnesium alcoholate, quadravalent titanium compound and organoaluminum compound being 1 : 0.05 : 0.3 to 1 : 2 : 5 and component (b) an aluminum-trialkyl having 1 to 12 carbon atoms in the alkyl radicals or aluminumisoprenyl, in molar ratio of 1 : 1 to 1 : 500 based on titanium and aluminium, the molar ratio of hydrogen to ethylene in the gas space of the two reaction zones being 1 : 0.01 to 1 : 0.5 in the first polymerization stage and 1 : 0.1 to 0.1 : 8 in the next polymerization stage, and the ratio of the amounts of polyolefins formed in the two polymerization stages being 30 : 70 to 70 : 30.

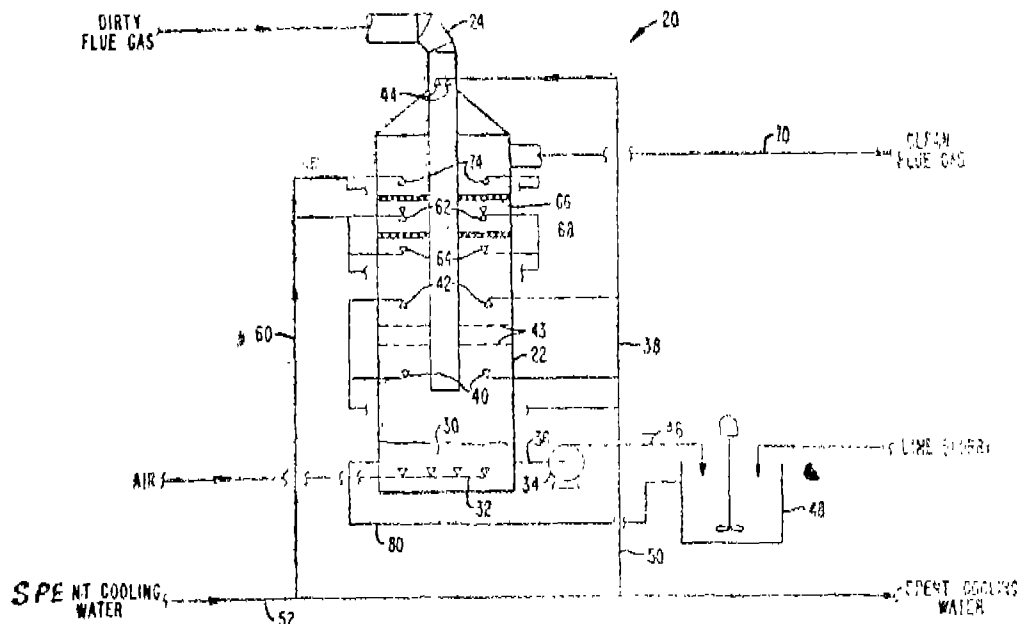
(Com. 25 pages)

Int. Cl.<sup>4</sup>—B01D 53/14

171664

Ind. Class—88-F-[GROUP-XXXII(3)]

A METHOD AND AN APPARATUS FOR PRODUCING A GAS STREAM FREE OF SULFUR-DIOXIDE FROM A GAS STREAM CONTAINING A SULFUR-DIOXIDE



(Com.-23 pages; Draws-1 sheet of size 33.00 cms. by 41.00 cms.)

Int. Cl.<sup>4</sup>: H01H 33/04

171665

Ind. Class: 69-N&O-[GROUP-I,IX(1)]

ROTATING ARC AND EXPANSION CIRCUIT BREAKER.

Applicant: MERLIN GERIN, A FRENCH COMPANY, OF RUE HENRI TARZE, F 38050 GRENOBLE CEDEX, FRANCE.

Applicant: BECHTEL GROUP INC., INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE U.S.A., 50 BEALE STREET, SAN FRANCISCO, CALIFORNIA-94119, U.S.A.

Inventors: (1) JACK Z. ABRAMS  
(2) AUGUST D. BENZ.  
(3) LEON AWERBUCH  
(4) STANLEY J. ZACZEK.  
(5) JOHN HAIDINGER

Application No. 428/MAS/88 filed June 23, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

(5 Claims)

A method of producing gas stream free of sulfur dioxide from a gas stream containing sulfur dioxide comprising the steps of recirculating an aqueous absorbent stream containing magnesium hydroxide and magnesium sulphite through a contact vessel; at a pH in the range from 4.5 to 6.0; diverting a portion of a seawater stream containing soluble magnesium to said vessel for incorporating said portion within the absorbent stream; mixing hydrated lime with a portion of the absorbent stream by diverting a portion of the recirculating absorbent stream to a slurry tank at a pH from 8.0 to 10.0, combining hydrated lime with the said aqueous absorbent, agitating the combined hydrated lime and aqueous absorbent for converting soluble magnesium derived from the seawater to magnesium hydroxide and returning the reaction product to the contact vessel; passing the flue gas stream through the contact vessel for reacting sulfur dioxide and magnesium hydroxide to produce magnesium sulfite; oxidizing the magnesium sulfite to magnesium sulfate by the introduction of air; reacting the magnesium sulfate with additional lime to form gypsum and magnesium hydroxide and bleeding a portion of the aqueous absorbent stream to continuously remove gypsum from said stream or slurry tank and recovering the gas stream free of sulfur dioxide in a known manner.

Inventors: (1) GEORGES BERNARD  
(2) RAYMOND BRESSON  
(3) PIERRE LECLERCQ  
(4) ODILE FILLEAU  
(5) FRANCOIS SCARPONI

Application No. 435/MAS/88 filed June 24, 1988.

Ind. Class. 28 C[XXX(1)]

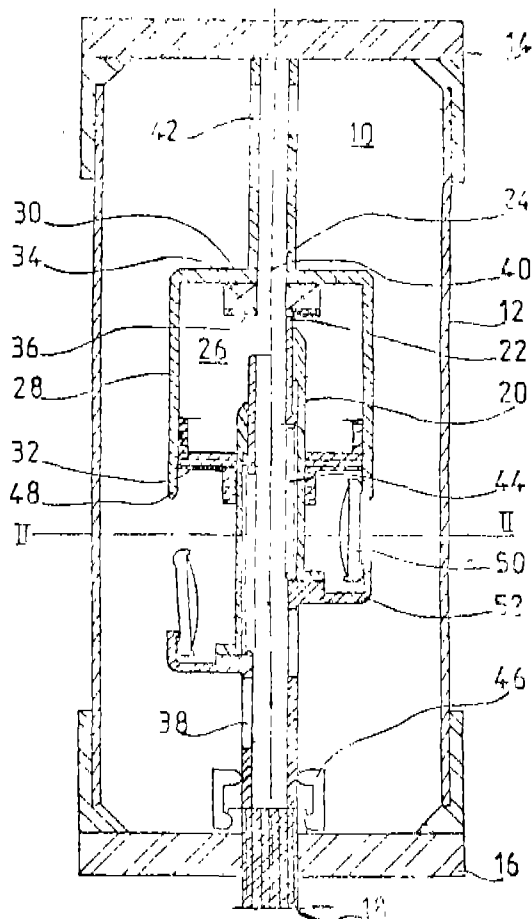
171666

Int. Class.: F 23D 17/00, 14/32.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**"A BURNER FOR PARTIAL OXIDATION FOR PRODUCING SYNTHETIC GASES".****11 Claims**

A rotating arc and expansion circuit breaker with a sealed enclosure (10) filled with a high dielectric strength gas and containing one or more poles of the circuit breaker, each pole comprising; a breaking chamber (26) having a revolution surface (28) tightly sealed at both its ends by end plates (30, 32), a pair of arcing contacts (20, 22; 24, 36) at least one of which is tubular, coaxially, arranged in said breaking chamber (26) and each passing through one of said end plates (30, 32) to make the breaking chamber communicate, in the separated position of the arcing contacts, with said enclosure forming an expansion chamber (10) via gas outflow channels constituted by the tubular arcing contact or contacts, a coil (34) or a permanent magnet supported by one (30) of said end plates inside the breaking chamber (26) so as to create in the arcing contact separation area a magnetic blowout field by rotation of an arc drawn between the separated arcing contacts, a pair of main contacts (48, 50; 48, 54, 56; 58, 60) disposed outside the breaking chamber (26) and arranged to open before the arcing contacts separate when a circuit breaker opening operation takes place, wherein said revolution surface (28) and the end plate (30) supporting the coil (34) or permanent magnet are made of metal and electricity connected to the arcing contact (24) passing through this end plate, the other end plate (32) being made of insulating material to provide electrical insulation in the open position of the contacts and wherein the annular edge of said revolution surface (28), adjacent to the insulating end plate (32) constitutes the stationary main contact (48, 58).



(Com.-15 pages; Drawgs.-5 sheets).

Applicant: INSTITUT FRANCAIS DU PETROLE a French body Corporate of 4, Avenue de Bois-Preau 92502 Rueil-Malmaison FRANCE.

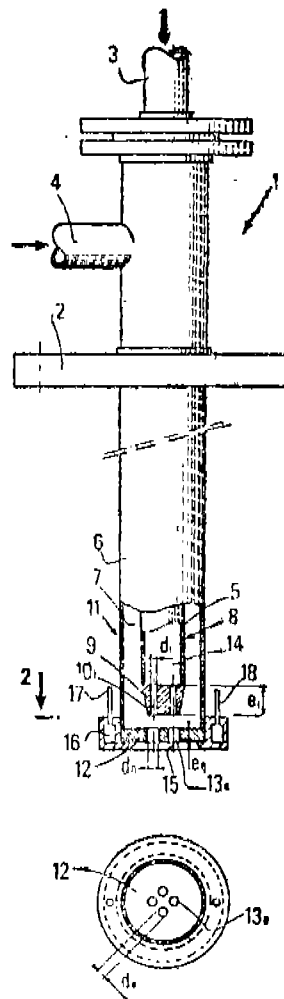
Inventors: 1. DAN G VU QUANG 2. ALAIN FEUGIER 3. PAUL GATEAU 4. BERNARD POUSSIN.

Application No. 445/MAS/88 filed on 28th June 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**(12 Claims)**

A burner for the partial oxidation under pressure of a first fluid by an oxidizer, having two gas introduction tubes namely internal tube and external tube, the said internal tube being coaxial to the said external tube, wherein said internal tube comprises an internal plate and said external tube comprises an external plate, each said plates having several holes and the said external plate having holes placed opposite to the holes of the internal plate.



(Complete specification 16 pages; Drawing 1 sheet)

Ind. Class : 55-A—[GROUP-XIX(1)]

Int. Cl.<sup>4</sup> : A 61K 7/32.

A 61L 9/02.

**PROCESS OF PREPARING A LIQUID OR GASEOUS MEDIUM FREE OF ODOR CAUSING ORGANIC COMPOUNDS**

Applicant : UNION CARBIDE CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK, U.S.A., OF OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT 06817, UNITED STATES OF AMERICA.

Inventors : (1) ANTHONY JOSEPH GIOFFRE

(2) BONITA KRISTOFFERSEON MARCUS.

Application No. 451/MAS/88 filed June 29, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**19 Claims (No drawing)**

Process of preparing a liquid or gaseous medium free of odor causing organic compounds such as herein described comprising the steps of contacting and adsorbing at a temperature of from -25°C to 100°C the molecules of the organic compound with at least partially activated crystalline siliceous molecular sieve having at least 90 per cent of the framework tetrahedral oxide units are  $\text{SiO}_2$  tetrahedra having pore diameters of at least 5.5 Angstroms and a capacity for adsorbed water of not greater than 10 weight percent when measured at 25°C and at a water vapor pressure of 4.6 torr.

(Com.-29 pages)

Ind. Class : 139-E [GROUP - IV(2)]

171668

Int. Cl.<sup>4</sup> : C 01 B 21/04.**PROCESS FOR PREPARING A NITROGEN-CONTAINING GAS MIXTURE**

Applicant : UNION CARBIDE CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK OF OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT 06817, U.S.A.

Inventor : CHIEN CHUNG CHAO

Application No. 453/MAS/88 filed June 30, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**8 Claims**

Process for preparing a nitrogen-containing gas mixture having an increased content of nitrogen from a starting mixture consisting essentially of nitrogen and oxygen comprising contacting said starting mixture at a temperature of from 15°C to 70°C and at a pressure of 50 torr to 10,000 torr with a crystalline zeolite X adsorbent having  $\text{SiO}_2/\text{Al}_2\text{O}_3$  framework with a molar ratio of not greater than 3.0 and having at least 88 per cent of its  $\text{AlO}_2$  tetrahedral units associated with lithium cation whereby nitrogen is selectively adsorbed on said zeolite, and thereafter recovering the nitrogen-enriched adsorbate from said zeolite.

(Som. 20 pages; Draws. - 2 sheets)

Ind. Class : 68E, [GROUP—LVII(3)]

171669

Int. Cl.<sup>4</sup> : H 02 J 11/00

9/00

**APPARATUS FOR REDUCING THE PEAK ELECTRICAL POWER DEMAND OF A PREDETERMINED OPERATIONAL UNIT FROM AN ELECTRICAL UTILITY POWER DISTRIBUTION.**

Inventors : (1) PHILLIP DEAN ALENDUFF.

(2) RICHARD ALOYSIUS CRUMP

(3) GREGORY JOE PORTER

Application No. 453/MAS 88 filed June 30, 1988.

Convention date : December 3, 1987 (No. 553, 438; Canada)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

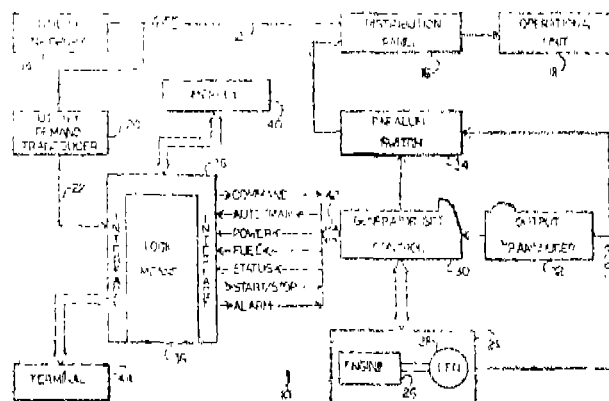
**10 Claims**

Apparatus (10) for reducing the peak electrical power demand of a predetermined operational unit (18) from an electrical utility power distribution network (14) by controllably operating at least one secondary electrical generator (24) associated with said operational unit (18) in parallel with said utility power distribution network (14), said secondary electrical generator (24) having switch means (34) for connecting said secondary electrical generator (24) in parallel with said utility power distribution network (14) in response to receiving a transfer command signal, comprising :

transducer means (20) for substantially continuously sensing the actual peak power demand of said operational unit (18) from said utility power distribution network (14) and producing a demand signal having a value responsive to said sensed actual peak power demand;

memory means (40) for controllably storing a plurality of control parameters including a predetermined demand setpoint value and a plurality of predetermined power percentage factors; and

logic means (36) for controllably producing said transfer command signal and responsively connecting said secondary electrical generator (24) in parallel with said utility power distribution network (14) in response to the value of said demand signal exceeding the value of said predetermined demand setpoint, controlling said secondary electrical generator (24) to produce only the amount of power necessary to maintain said demand signal value at or below said predetermined demand setpoint value, and controllably variably limiting the maximum amount of power produced by said secondary electrical generator (24) to a predetermined percentage of the secondary electrical generator (24) maximum power capacity in accordance with a preselected one of said plurality of predetermined power percentage factors.



(Com. - 22 pages; Draws. - 7 sheets)

Int. Class : 172-D 4&amp;8 - GROUP - XX

171670

Int. Cl.<sup>4</sup> : D 01 H 1/10**A METHOD OF AND APPARATUS FOR FALSE-TWIST SPINNING**

Applicant : MASCHINENFABRIK RIETER AG, A BODY CORPORATE ORGANISED UNDER THE LAWS OF SWITZERLAND, OF WINTERTHUR, SWITZERLAND.

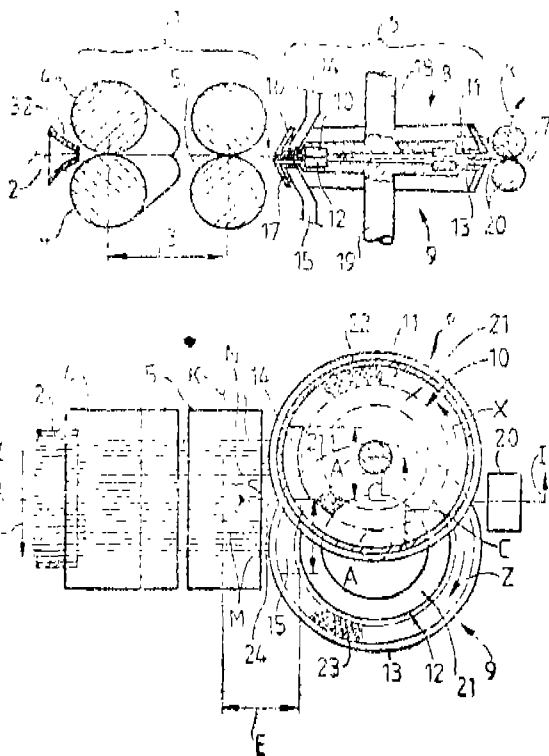
Inventor : HANS FLUECKIGER

Application No. 477/MAS/88 filed July 7, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 18 Claims

A method of false twist spinning comprising the steps of delivering a sliver (2) in a predetermined width (F) from a sliver feeder (1) forming a nip line (K); engaging the front end of the sliver fibres in the direction (P) of fibre movement by suction means (11, 13; 11.1, 13.1; 58; 59) supplying the inner part (R) of said fibres to subsequent twisting means (10, 12, 10.1, 12.1, 62, 63) to form a false twisted yarn core (24); supplying at least outer parts (M, N) of the sliver (2) with edge fibres by the suction means (11, 13; 11.1, 13.1; 58, 59) to the false-twisted yarn core (24) to wind around the yarn core (24) with a pitch (r) steeper in the pitch (B) of the false-twisted yarn core (24), wherein all the fibres are engaged by the suction surfaces movable in opposite direction so as to mingle with one another and move in the direction (P) of yarn conveyance the fibres conveyed by the suction surfaces (11, 13; 11.1, 13.1; 58, 59) in the said direction (P) are taken by the twisting means (10, 12; 10.1, 12.1; 62, 63) to be twisted together with the false-twisted yarn core (24) while also being conveyed onwards in the said direction (P), and the distance (E) between the nip line (K) and an imaginary predetermined intersection (D D.1) of the friction surfaces in such relation to the average fibre length of the sliver (2) that the rotating yarn core (24) engages the edge fibres (M, N) at their front end for as long as their rear end remains clamped in the nip line (K), so that the edge fibres (M, N) leave the nip line (K) only after they have been twisted around the yarn core (24) and engaged by the spinning triangle (S).



(Com. 26 pages;

Drawgs. 10 sheets)

Inventor : HUSSAIN ALI-KASHEF AL GHATTA.

Application No. 497/MAS/88 filed July 13, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 4 Claims (No drawing)

A method of purifying polyethyleneterephthalate or copolymer thereof comprising the steps of heating the impure polyethyleneterephthalate or copolymer thereof in an atmosphere containing carbon dioxide at a pressure greater than 50 bars and temperature between 31°C and 245°C under supercritical conditions and obtaining polyethyleneterephthalate or copolymer thereof with reduced acetaldehyde content.

(Com. 6 pages).

Ind. Class : 172 D<sub>2</sub> [GROUP—XX]

171672

Int. Cl.<sup>4</sup> : D 01 H 9/00; 11/00.

APPARATUS FOR DOFFING BOBBINS FROM ROVING FRAMES AND REPLACING THE DOFFED BOBBINS WITH EMPTY TUBES.

Applicant : FRATELLI MARZOLI & C. SpA, OF VIA DURANTE 1, 25036—PALAZZOLO SULL'OGGIO, (BRESCIA), ITALY.

Inventor : PIETRO BIANCHI MARZOLI.

Application No. 511/MAS/88 filed July 19, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 6 Claims

An apparatus for doffing bobbins (20) from a roving frame (17) and replacing the doffed bobbins with empty tubes (3), comprising a bobbin rail (16) with two rows of equidistant spindles (19) for supporting said empty tubes (3), said bobbin rail (16) being vertically movable to an upper position for filling the tubes (3) with roving by flyers (21) and to a lower position, a device for moving said bobbin rail (16) being in its lower position to a particular doffing position wherein the said apparatus comprises an endless horizontally arranged conveyor belt (1) with equidistant grippers (2) for gripping, hanging empty tubes (3) and bobbins (20) respectively, the distance of said grippers (2) being half as long as the distance of the spindles (19) on said rail (16), said conveyor belt (1) being displaceable in its longitudinal axis for a distance equal to said distance of two said grippers (2) to transfer tubes (3) on the empty spindles (19), said bobbin rail (16) being movable orthogonally to its longitudinal axis to a position vertically below said conveyor belt (1).

(Com. 10 pages;

Drwg. 1 sheet)

Ind. Class : 172-D<sub>4</sub> [GROUP—XX]

171673

Int. Cl.<sup>4</sup> : D 01 H 13/14.

AN APPARATUS FOR CLEARING FAULTS AT FAULT-REPORTING WORK STATIONS.

Applicant : MASCHINENFABRIK RIETER AG., OF CH-8406 WINTERTHUR, SWITZERLAND, A BODY CORPORATE ORGANISED UNDER THE LAWS OF SWITZERLAND.

Inventors : (1) URS MEYER AND (2) STEFAN HUPPI.

Application No. 567/MAS/88 filed August 9, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 5 Claims

An apparatus for clearing faults at fault-reporting work stations on at least one textile machine having a number of work stations comprising at least two robots movable on a

Ind. Cl. : 32-E [GROUP—IX(4)]

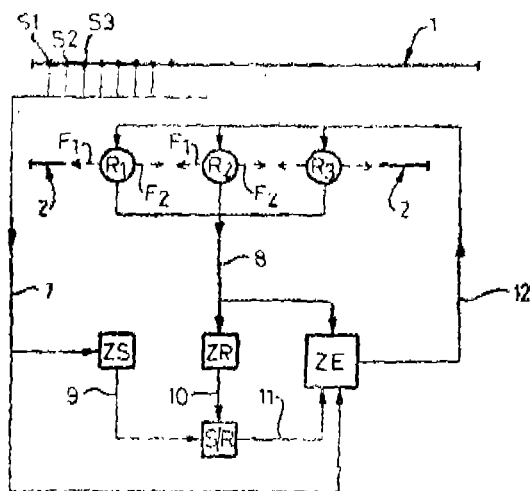
171671

Int. Cl.<sup>4</sup> : C 08 G 63/18.

A METHOD OF PURIFYING POLYETHYLENTEREPHTHALATE OR COPOLYMER THEREOF.

Applicant : COBARR S.p.A., AN ITALIAN JOINT STOCK COMPANY, OF 05012 ANAGNI (FROSINONE), VIA ANTI-COLANA Km. 1, ITALY.

track (2) along the textile machine and controllable by a central control unit, stationary yarn monitors associated with each said work station reporting faulty stations to the said central control unit (ZE), all the said work stations (S1, S2, S3) has communication means to communicate through a reporting line with a counter (ZS) of the faulty stations (T1, T2, T3) and with the said central control unit (ZE); all the robots (R1, R2, R3) has communication means to communicate through a reporting line (8) with a counter (ZR) of the in-use robots and with the said central control unit (ZE); a division module (S/R) to transmit via a reporting line (7) to the said central control unit (ZE) a report corresponding to the numerical division between the faulty stations and the said robots, and the said central control unit has means to detect and evaluate the faulty stations and the in-use robots numerically and by position in order to determine the sub-sections A, B, C of the track (2) for each robot and to direct the robots to their sub-sections by way of a control line (12).



(Com. 15 pages;

Drwgs. 3 sheets)

Ind. Class : 196-B1, 2 [GROUP—XXVI (4)]

171674

Int. Cl.<sup>4</sup> : B 60 H 1/20.

#### A WINDOW AIR COOLER FOR VEHICLES.

Applicant & Inventor : THIRUMALAI ANANDAMPILLAI VIJAYAN, 25, 29TH STREET, NANGANALLUR, MADRAS-61, TAMIL NADU-600 061, INDIAN NATIONAL.

Application and Provisional Specification No. 530/MAS/88 filed July 27, 1988.

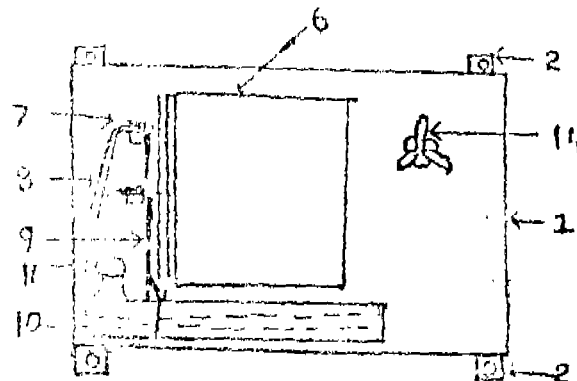
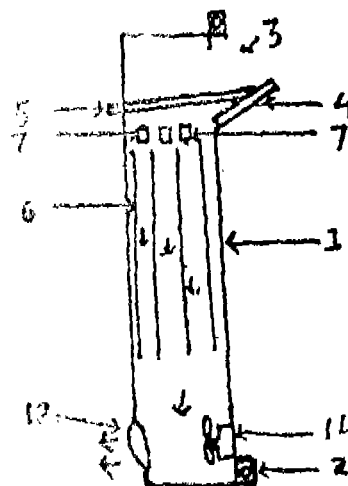
Complete Specification left July 26, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 4 Claims

A window Air Cooler for vehicles comprising a box, the said box having on its inside a water reservoir and on its outside at least one air inlet, the said air inlet leading into the said box, wherein two or more metal sheets are placed vertically, the said sheets having on its front one or more water spraying jets, the said jets being worked by compressed air of the compressed air supply of the vehicle, the said box having a

cool air exit at its inside surface the said cool air exit having a blower.



(Prov. 3 pages; Com. 6 pages;

Drwgs. 1 sheet)

Ind. Class : 188 [GROUP—XXXIII(9)]

171675

Int. Cl.<sup>4</sup> : C 23 C 16/44; 16/54.

A METHOD AND AN APPARATUS FOR PRODUCING A SUBSTRATE WITH A SURFACE LAYER OF A MATERIAL SELECTED FROM CARBIDE, NITRIDE, CARBONITRIDE AND A MIXTURE THEREOF.

Applicant : KABUSHIKI KAISHA TOYOTA CHUO KEN-KYUSHO, ORGANIZED AND EXISTING UNDER THE LAWS OF JAPAN, OF 41-1, AZA YOKOMICHI, OAZA NAGAKUTE, NAGAKUTE-CHO, AICHI-GUN, AICHI-KEN, 480-11, JAPAN.

Application No. 562/MAS/88 filed August 5, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 18 Claims

A method for producing a substrate with a surface layer of a material selected from carbide, nitride, carbonitride and a mixture thereof, comprising the steps of disposing in a fluidized bed furnace a mass of particles of a layer-forming agent such as herein described containing at least one element for forming the surface layer below and/or at the side of said substrate without contact with said substrate; disposing a powder of alumina or other refractory material as a fluidizing agent for forming a fluidized bed in the said fluidized bed furnace; introducing a fluidizing gas selected from the group consisting of a nitrogen gas, a nitrogen-containing gas, and a mixture of nitrogen or nitrogen-containing gas with argon into





STATE OF NEW YORK, UNITED STATES OF AMERICA, OF 150 EAST 42nd STREET, NEW YORK, NEW YORK 10017, UNITED STATES OF AMERICA.

Inventors : (1) POCHEN CHU, (2) GARRY WAYNE KIRKER, (3) DONALD JOSEPH KLOCKE, (4) JOHN PAUL McWILLIAMS, (5) DAVID OWEN MARIER and (6) JAMES CLARKE VARTULI.

Application No. 577/MAS/88 filed August 11, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 18 Claims

A method of producing a crystalline zeolite comprising the steps of forming an aqueous reaction mixture containing a nitrogenous organic directing agent (R) selected from pyrrolidine or ethylenediamine, silicon dioxide, alumina and an alkali metal cation (M) wherein the mole ratios of the

$\text{SiO}_2/\text{Al}_2\text{O}_3$	6-200
$\text{H}_2\text{O}/\text{SiO}_2$	2-250
$\text{OH}^-/\text{SiO}_2$	0.001-0.5
$\text{M}^+/\text{SiO}_2$	0.001-0.5
$\text{R}/\text{SiO}_2$	0.1-1.2

said oxides are maintaining the said mixture at a temperature of 82° to 127°C until nucleation of crystals has commenced and thereafter maintaining the said mixture at a temperature of 132° to 177° until crystallisation of said zeolite has occurred and recovering the crystallised zeolite in a known manner.

Com. 32 pages

(No drawing)

Ind. Class : 90-G [GROUP—XXXVI]

171678

Int. Cl.<sup>4</sup> - C 03 C 17/09

AN APPARATUS AND A METHOD FOR PRODUCING COATED FLAT GLASS.

Applicant : PILKINGTON PLC, A BRITISH COMPANY OF PRESCOT ROAD, ST. HELENS, MERSEYSIDE WA 10 3TT, ENGLAND.

Inventor : RONALD FRANK BERRY.

Application No. 590/MAS/88 filed August 18, 1988.

Convention date : August 28, 1987;

(No. 8720360; United Kingdom)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 11 Claims

An apparatus for producing coated flat glass by deposition of a coating from a coating gas comprising a support (2) for the glass to be coated, means (5) for advancing the glass over said support (2), a gas supply duct (33) extending transversely of the path of travel of the glass arranged to direct a coating gas onto the hot glass surface in a coating zone, diverting means (37) with a surface adjacent the glass surface for diverting used gas away from the glass at the downstream end of the coating zone, an exhaust channel (47C) for flow of used coating gas a way from the glass surface, and suction means (60) for collecting used gas from the exhaust channel wherein the suction means is connected to the exhaust channel (47C) and the said surface of the diverting means (37) is spaced from the path of travel of the glass for induction of a stream of inert gas over said surface by operation of the suction means (60).

3—357GI/92

In a method of producing coated flat glass by chemical vapour deposition using the apparatus as claimed in claim 1, the improvement comprising a stream of inert gas such as herein described is passed over said surface of the diverting means adjacent the glass to inhibit formation of a deposit from the used gas on said surface.

Com - 19 Pages;

Drwgs. - 4 sheets

Ind. Class : 150-F&G [GROUP—XLVIII(1)]

171679

Int. Cl.<sup>4</sup> : F 16 L 17/00  
19/00.

A HIGH PRESSURE CASING SEAL FOR SEALING AN ANNULAR SPACE.

Applicant : FMC CORPORATION, A DELAWARE CORPORATION HAVING EXECUTIVE OFFICES AT 200 EAST RANDOLPH DRIVE, CHICAGO, ILLINOIS 60601, U.S.A.

Inventors : (1) DAVID ALFRED ZOLLO.  
(2) ROY WAYNE BENEFIELD.  
(3) DAVID EARL CAIN.  
(4) PHILLIP FENG-SU HUANG.  
(5) BRENDA KALLUS MONTEMAYOR.  
(6) STEPHEN LEIGH NEELD.  
(7) JOHN CHARLES VICIC.  
(8) DON BRYCE WAFER.

Application No. 592/MAS/88 filed August 19, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 3 Claims

A higher pressure casing seal (34) for sealing an annular space (01, 60, 07) between a round tubular casing (30) and a concentric round bore (31) in a casing head (10), the casing seal of the type comprising a metal piston ring (47) having a generally T-shaped cross-section defined by an annular flat piston section (34a) forming a cross bar (34) of the T and by a cylindrical tubular section (35) centrally located underneath the piston section forming a stem of the T, the cross section of the cross bar having inner and outer wedge like undersides (55, 56) sloping downwardly and inwardly and merging into the tubular section on opposite peripheral sides thereof,

a pair of inner and outer elastomeric seal rings (60, 61), encircling the opposite peripheral sides of the tubular section, a pair of inner and outer wedge shaped non-extrusion rings (73, 74) positioned between the seal rings and the undersides of the cross bar, the non-extrusion rings having a flat annular side coplanar with the flat piston section adjacent one axial side of each seal ring and having a radially outwardly slidable wedge side sloping upwardly and outwardly adjacent each wedge like underside of the cross bar,

each non-extrusion ring of the second pair respectively slidably forced into contact with the casing (36) and bore wall (37) upon axial movement of the wedge like underside of the cross bar pushing against the non-extrusion rings, and a second metal ring having inner and outer annular portions (62, 63) encircling an end portion of the opposite peripheral sides of the tubular section axially adjacent the seal rings forming a guide for axial movement of the tubular section when the piston section is axially moved by high pressure formed in the annular space,

a second pair of inner and outer wedge shaped non-extrusion rings (80, 81) similar in slope and forced radial sliding movement to the first mentioned pair having the flat annular side adjacent each annular portion of the second metal ring, and

a third pair of inner and outer wedge shaped non-extrusion rings (78, 79) opposite in slope and forced radial slid-

ing movement with respect to the second pair having the flat annular side adjacent a second axial side of each seal ring and having a radially inwardly slidable wedge side (80a) sloping downwardly and inwardly adjacent each wedge side (78a) of the second pair of extrusion rings, each non-extrusion ring of the third pair slidably forced into contact with the opposite peripheral sides (53) of the tubular section upon axial compression of the seal rings between the first and second pairs of extrusion rings.

(Com. 11 pages;

Drwgs. 2 sheets)

Ind. Class : 86-E [GROUP—LXVI(4)]

171680

Int. Cl.<sup>4</sup> : B 26 B 27/00.

A WIRE SPACER FOR SPACING NESTED FORMED OR SHAPED GALVANIZED METAL PIECES.

Applicant: TRI-STEEL INDUSTRIES INC., A CANADIAN COMPANY, OF 1565 CABOT STREET, MONTREAL, QUEBEC, CANADA H4E 1C8.

Inventor: STEVE LEGIER.

Application No. 606/MAS/88 filed August 29, 1988.

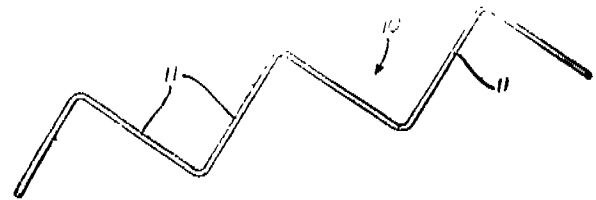
Convention dated: April 11, 1988; (No. 563,811; Canada).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 10 Claims

A wire spacer for spacing nested formed or shaped galvanized metal pieces having a nestable profile and at least two opposed stacks of said nested material pieces disposed and secured in a side-by-side relationship to form a bundle, said wire spacer comprising at least a metal wire treated with a corrosive resistant coating and formed of similar profile as the cross-section of at least part of the profile of two of said material pieces positioned side by side, a cross-section to provide reduced contact with the surface of opposed nested ones of said pieces when positioned in contact therebetween to provide air flow and minimum water retention between said nested material pieces to substantially reduce the information of white rust, and extending between

said opposed stacks to maintain said stacks connected together by a plurality of said wire rods.



(Com. 11 pages;

Drwgs. 2 sheets)

Ind. Class : 134—B&C [GROUP—LII(1)]

171681

Int. Cl.<sup>4</sup> : B 60 B 35/00; 37/00.

AN AXIE ASSEMBLY FOR A VEHICLE.

Applicant: THOR S.A., OF 8, CHEMIN DU SOUVOY, 77165 SAINT-SOUPPLET, FRANCE, A FRENCH COMPANY.

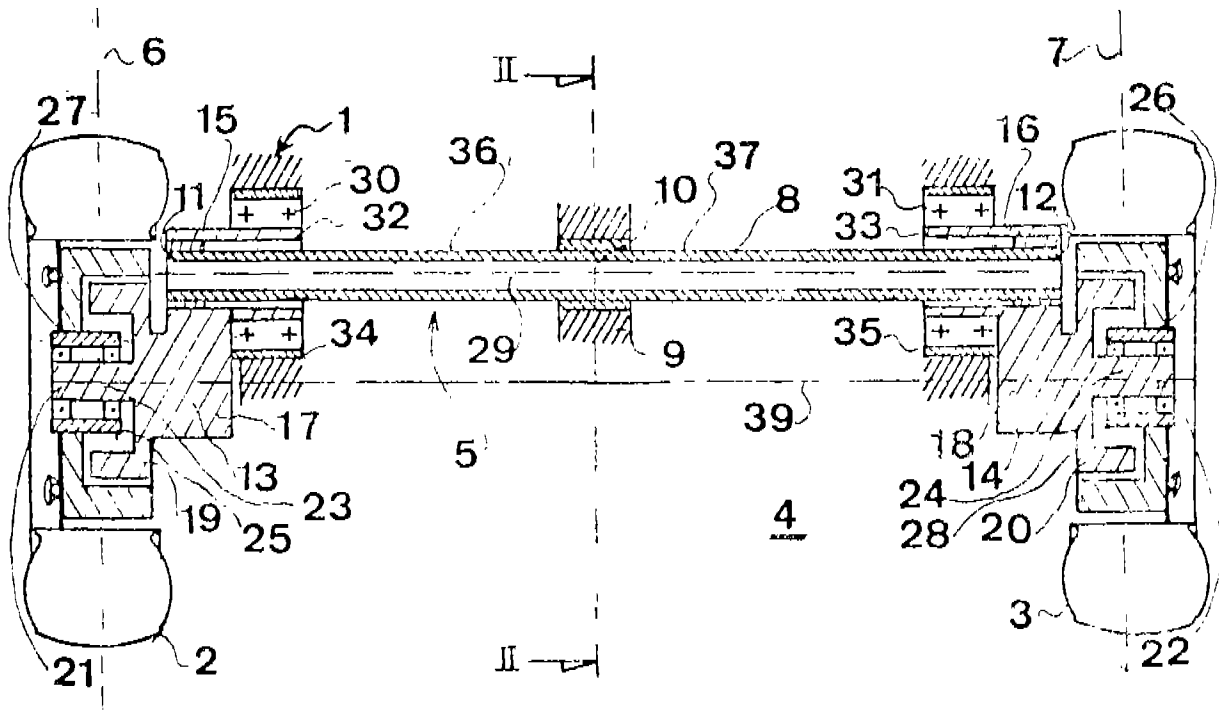
Inventor: MONSIEUR MAX SARBOU.

Application No. 662/MAS/88 filed September 21, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 24 Claims

An axle assembly for a vehicle comprising a chassis, at least two wheels suitable for coming into contact with ground means for associating said two wheels with said chassis and for holding them in two substantially parallel planes, characterised in that said means for associating said two wheels with said chassis and for holding them in two substantially parallel planes comprises a unit beam, means for preventing a point situated substantially between the two ends of the beam from rotating relative to said chassis, two arms, means for fixing each arm substantially at one of its ends to a respective one of the two ends of the beam, and means for rotatably mounting respective ones of said two wheels to the opposite ends of said arms, wherein the two portions of the beam situated on either side of said point situated between the two ends of the beam are made of a material having anisotropic torsion elasticity in the opposite directions.



(Com. 26 pages;

Drwgs. 5 sheets)

Ind. Class : 10 F [XXXIX(2)]

171682

Int. Class : F 42 B 33/00.

# PRE-BARREL SAFETY MECHANISM ON A PROJECTILE.

Applicant : DYNAMIT NOBEL AKTIENGESellschaft, OF KAISERSTRASSE 1, D-5210 TROISDORF, FEDERAL REPUBLIC OF GERMANY.

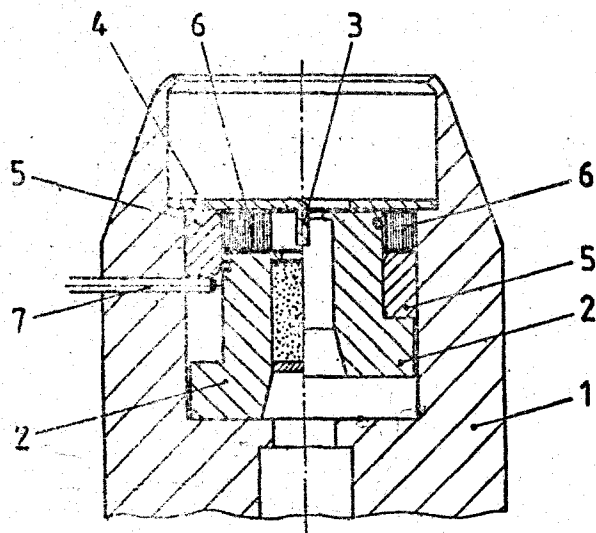
Inventors : 1. UWE BREDE, 2. ERNST JENSEN, 3. HELMUTH WERNER.

Application No. 664/MAS/88 filed on 21st September 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

## 4 Claims

A pre-barrel safety mechanism on a projectile comprising a percussion fuse formed by a set of spiral springs (6) in which at least three springs (8, 9, 10) are wound up one after the other, in opposite directions sequentially, the said set of springs (6) being held by a cage (5) in a tensioned manner ready to unwind as soon as the cage (5) slides over the set of spiral springs (6) by the acceleration on firing.



(Comp. specn. 9 pages;

Drwg. 2 sheets)

Ind. Class : 172—D8 [XX]

171683

Int. Class : D 01 H 1/04.

# A YARN TWISTING MACHINE.

Applicant : OFFICINE MECCANICHE RIVA S.r.l. OF VIA VIGNOLA, 7-22048 OGGIONO (COMO), ITALY, AN ITALIAN COMPANY.

Inventor : FRANCO BIANCHI.

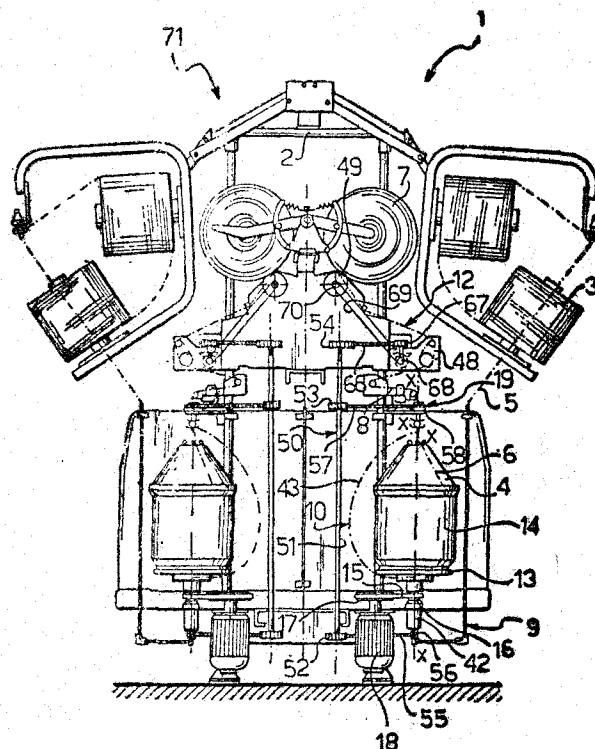
Application No. 713/MAS/88 filed on 11th October 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

## 5 Claims

A yarn twisting machine comprising a main frame (2), first and second yarn paths (9, 10) converging toward a yarn gathering point (11) where the yarns are gathered as they are respectively supplied from a first pay-off reel (3) carried on the main frame (2) and a second pay-off reel (4) carried on a spindle (13) journaled in the main frame (2), a twisted thread path (12) extending from said yarn gather-

ing point (11) to a take-up reel (17), a flyer (19) journaled in the main frame (2) at the yarn gathering point (11) and a capstan feed (48) in the thread path (12) from the yarn gathering point (11) to the pick-up reel (7), and a positive mechanical drive (50) for rotatively coupling the said flyer (19) and said capstan (48) directly to the said spindle (13).



(Comp. specn. 13 pages;

Drwg. 2 sheet)

Ind. Cl. : 153 [GROUP XLIII (3)]

171689

Int. Cl. : B 24 B 19/10.

# CENTERLESS GRINDING APPARATUS OF THROUGH-FEED TYPE

Applicant : AKEBONO BRAKE INDUSTRY CO. LTD., of 19-5, Nihonbashi Koami-cho Chuo-ku, Tokyo, Japan, a Japanese Company.

Inventors : 1. SUSUMUTTOH  
2. KAZUO SATOH  
3. TOMONORI SAKUMA

Application No. 798/MAS/88 filed on 15th November, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972- Patent Office Branch, Madras.

## 7 Claims

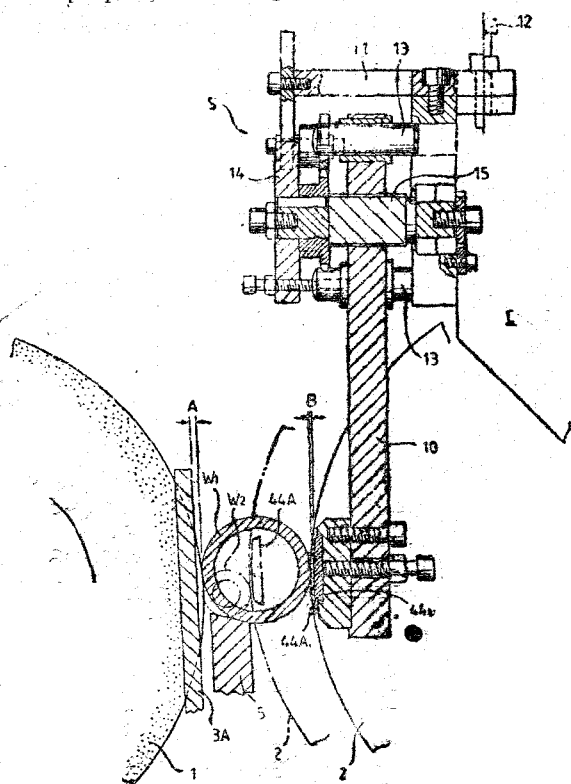
A centerless grinding apparatus for grinding a work, comprising : a grinding wheel;

a regulating feed wheel disposed at an opposed position to said grinding wheel;

a first and second guide plates provided at a side of said grinding wheel, said first and second guide plates having a first guide surface from which said grinding wheel protrudes by a grinding width; and

a third and fourth guide plates provided at a side of said regulating feed wheel, said third and fourth guide plates having a second guide surface from which said regulating

feed wheel protrudes by a feed width, said second guide surface being curved into a curvature equal to a curvature of the outer periphery of said regulating feed wheel.



(Com. Specn. 15 pages : Drgs. : 6 sheets)

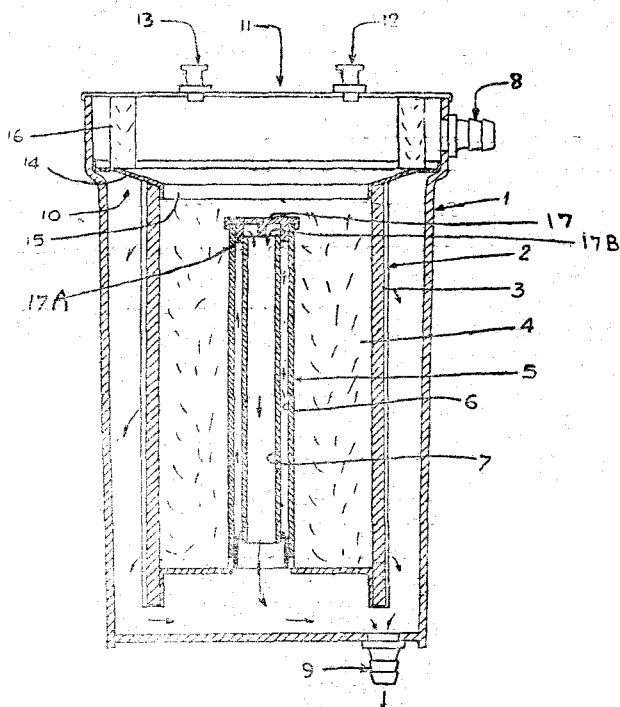
Ind. Class : 128-G [GROUP—XIX(2)]

171685

Int. Cl.<sup>4</sup> - A 61 M 1/34

IMPROVED RIGID SHELL CARDIOTOMY RESERVOIR

Applicant : SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY, BIOMEDICAL TECHNOLOGY WING, OF SATELMOND PALACE, TRIVANDRUM-695 012, INDIA, AN INDIAN ORGANISATION.



Inventors : (1) BALAKRISHNAN NAIR AJIT KUMAR

(2) DIVAKARA PANICKER SOLOCHANA NAGESH

(3) OMANAAMMA SREEDHARAN NEELAKANTAN NAIR

(4) ASWATH NARAYANAN VENKATA RAMANI

(5) DIVAKARAN RANJIT

(6) HARIKRISHAN VIJAYAKUMAR

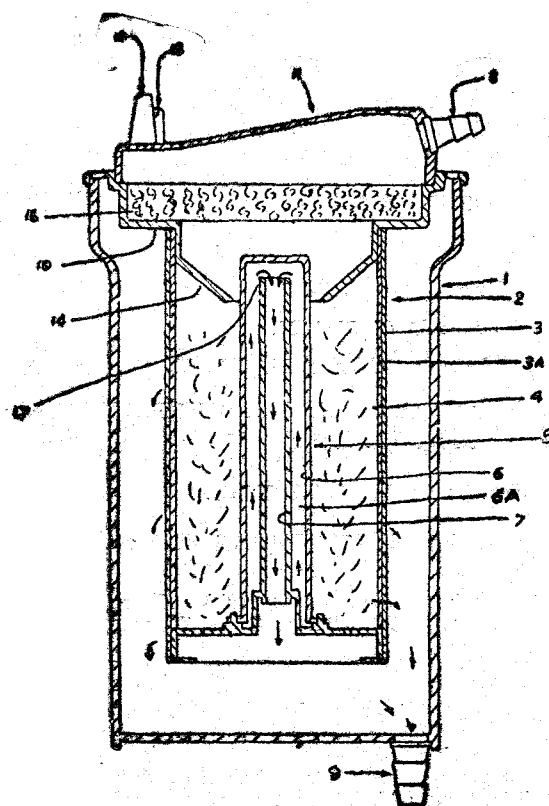
Application and Provisional Specification No. 915/MAS/88 filed December 23, 1988.

Complete Specification left March 19, 1990.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Madras Branch.

## 6 Claims

A cardiotomy reservoir having a rigid outer shell, housing therein an inner shell provided with a microfilter, a defoamer and a blood by-pass unit, said microfilter material made of sheet or pad of plastic material such as polyethylene or polypropylene being provided as a layer on the inside wall of the inner shell, said defoamer material made of fibrous plastic such as polyethylene or polypropylene being provided between the micro-filter and the blood by-pass unit, the outer shell having an inlet for blood to be filtered and defoamed and an outlet for filtered and defoamed blood, the outer shell also having gas vent and priming port, said by-pass unit being a syphoning unit connecting the inside of the inner shell to the outlet port.



(Prov.-5 pages; Com.-10 pages;  
Drgs. - 1 sheet.

Drwgs. - 2 sheets)

Ind. Class : 33-F [GROUP—XXXIII(3)] 171686

Int. Cl.<sup>4</sup> - B 22 C 9/00

**"A METHOD OF MAKING A FOUNDRY MOULDING SHAPE OR CORE SHAPE"**

Applicant : BORDEN (UK) LIMITED, A CORPORATION DULY ORGANISED UNDER THE LAWS OF THE UNITED KINGDOM, OF NORTH BADIESIEY, SOUTHAMPTON SO5 9ZB, ENGLAND.

Inventors : (1) PETER HERBERT RICHARD BRYAN IENON

(2) JEFFREY DAVID RAILTON

(3) DEREK WILLIAM BAKER

(4) JOHN IDELAND

Application No. 919/MAS/88 filed December 26, 1988.

Convention date : January 12, 1988; (No. 8800614; United Kingdom)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office, Madras Branch.

9 Claims (No drawing)

A method of making a foundry moulding shape or core shape comprising the steps of :

(1) preparing a composition having a mixture of

(a) a granular refractory material;

(b) from 0.25% to 8% by weight based on the weight of the granular refractory material of an aqueous solution having a solids content of 25% to 75% by weight of an alkali phenolformaldehyde resole resin having a viscosity in the range of from 20 cP to 1000 cP at 25°C;

(c) styrenated phenol; and

(d) an amount effective to catalyze the curing of the resin of at least one liquid organic ester;

(2) forming the product of step (1) into a shape and

(3) allowing said shape to harden to obtain a foundry moulding shape or core shape.

(Com. - 27 pages)

Ind. Class : 131-AT [GROUP—XXVIII(3)] 171687

Int. Cl.<sup>4</sup> - E 21 B 19/02

**A WELL CASING SUSPENSION SYSTEM FOR SUPPORTING A PLURALITY OF CONCENTRIC CASING STRINGS IN A WELLHEAD**

Applicant : FMC CORPORATION, A DELAWARE CORPORATION, OF 200 EAST RANDOLPH DRIVE, CHICAGO, ILLINOIS 60601, U.S.A.

Inventors : (1) RANDY JAMES WASTER

(2) BOB CLAYTON HOPKINS

(3) DONALD MICHAEL UNDERWOOD

Application No. 924/MAS/88 filed December 28, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office, Madras Branch.

4 Claims

A well casing suspension system for supporting a plurality of concentric casing strings in a wellhead, comprising

(a) an annular wellhead housing having at least one annular groove in its inner surface having a pair of annular frusto-conical upwardly and inwardly facing support surfaces and at least one annular frusto-conical downwardly and inwardly facing cam surface;

(b) a casing hanger assembly comprising

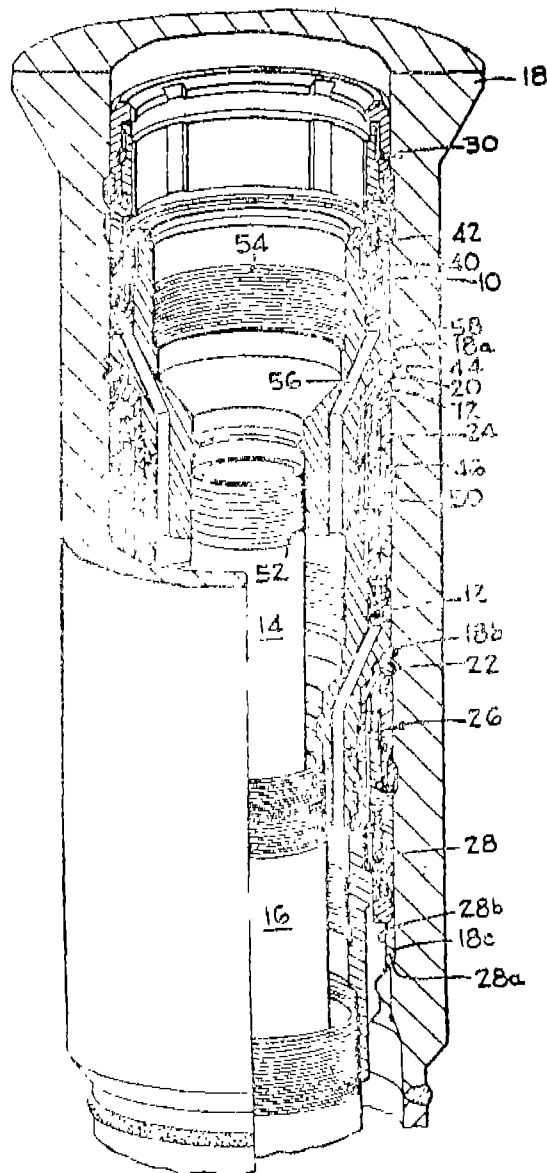
(i) a tubular body having first attaching means for attaching therein a well casing string and having second attaching means axially spaced from said first attaching means for attaching therein a hanger running tool, an upper annular external shoulder with a first downwardly facing frusto-conical surface, a first cylindrical surface extending axially downward from said first frusto-conical surface, an annular groove

in said first cylindrical surface intermediate its ends, and stop means for a co-axial sleeve on the outer surface of said body axially spaced below said first cylindrical surface;

(ii) an expandable, split, multi-shouldered load ring surrounding said body beneath said external shoulder, said load ring having a first inner frustoconical surface complementary to said first frustoconical surface of said body, an inner cylindrical surface extending from said first inner frustoconical surface, an annular flange extending inwardly from said inner cylindrical surface, a second inner frusto-conical surface extending from said inner cylindrical surface, and annular radial surface extending from said second inner frusto-conical surface, at least one downwardly and outwardly facing frusto-conical load supporting surface, and at least one upwardly and outwardly facing frusto-conical surface; and

(iii) trigger means having said co-axial sleeve surrounding and releasably secured to said body between said load ring and stop means, said trigger means having a frusto-conical surface complementary to said second inner frusto-conical surface of said load ring, and an annular radial surface in opposed position with respect to said load ring radial surface; and

(c) an annular packoff assembly positioned within the wellhead housing to prevent further downward movement of said trigger means when said casing hanger assembly is lowered into said housing.



(Com. - 14 pages; Drawgs. - 2 sheets each of size 33.00 cms by 41.00 cms.)

Ind. Class : 156-G [GROUP—XLVII(3)]

171688

Int. Cl. : F 04 B 49/08 F 15 C 3/00

# **AUTOMATIC CONTROL FOR VARIABLE DISPLACEMENT PUMP**

Applicant : HAGGLUNDS DENISON CORPORATION,  
A CORPORATION ORGANISED UNDER THE LAWS OF  
DELAWARE, U.S.A., OF 1220 DUBLIN ROAD, COLUM-  
BUS, OHIO, U.S.A.

Inventors : (1) ELLIS H. BORN  
(2) DAVID L. THURSTON  
(3) LEE A. DeBoer

Application No. 228/MAS/89 filed March 22, 1989.

Appropriate Office for Opposition Proceedings (Rule 4,  
Patents Rules, 1972), Patent Office Branch, Madras.

## **6 Claims**

An automatic control for a variable displacement pump having a displacement setting device movable between a maximum displacement position and a minimum displacement position, said device having a stroking piston, a first spring which acts to bias the displacement setting device to the maximum displacement position, a first fluid conduit connected to said stroking piston and adapted to receive or discharge control pressure fluid from said control to move said stroking piston and thereby vary the displacement of said pump, said automatic control comprising :

a pilot operated stroke control having a sleeve, a first port in said sleeve connected to said first fluid conduit, a spool movable in said sleeve, a control land formed on said spool which cooperates with said first port of said sleeve, a source of working pressure fluid, second fluid conduit for connecting said working pressure fluid to one side of said control land, a case adapted to receive low pressure fluid, third fluid conduit for connecting said case pressure fluid to the other side of said land, said spool movable between a first control position in which said control land blocks said case pressure fluid from said first port and connects said control pressure fluid source to said first port to overcome the force of said first spring and bias said stroking piston to a position of reduced pump displacement and a second control position in which said control land blocks said control pressure fluid source from said first port and connects said case pressure fluid to said first port to drain fluid from said first fluid conduit to allow said first spring to bias said stroking piston to a position of increased pump displacement with a third control position in which said control land blocks both said control pressure fluid source and said case pressure fluid from said port to substantially maintain the set pump displacement, second spring means for biasing said control spool to said second control position, a first control orifice formed in said control piston, a source of pilot fluid and fourth fluid conduit for connecting said pilot fluid to the upstream side of said first control orifice wherein said stroke control spool will shift to said first control position when the flow of pilot fluid causes a pressure drop which overcomes the force of said second spring means;

a pilot relief valve which provides the maximum pressure setting for said pump;

fifth fluid conduit for connecting said pilot relief valve to the downstream side of said first control orifice for receipt of pilot fluid therefrom to enable said pilot fluid to flow through said first control orifice when the maximum pressure setting for said pump is attained;

a load sensing relief valve which provides a load modulated pressure setting for said pump having an inlet port and an exhaust port connected to case;

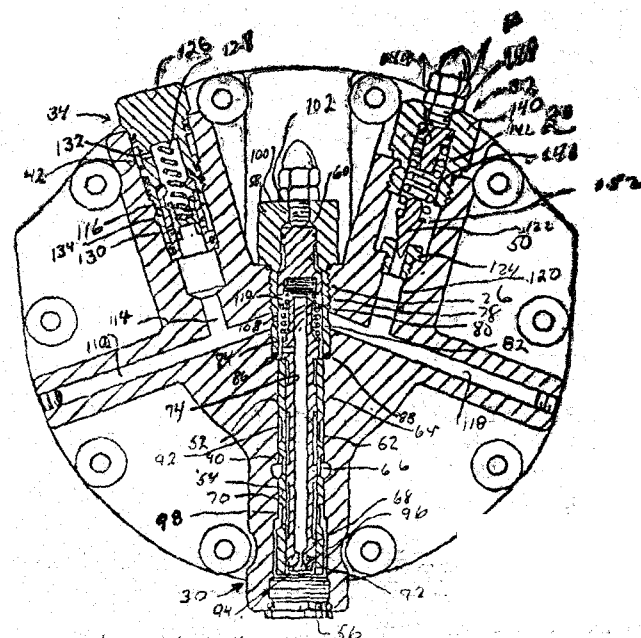
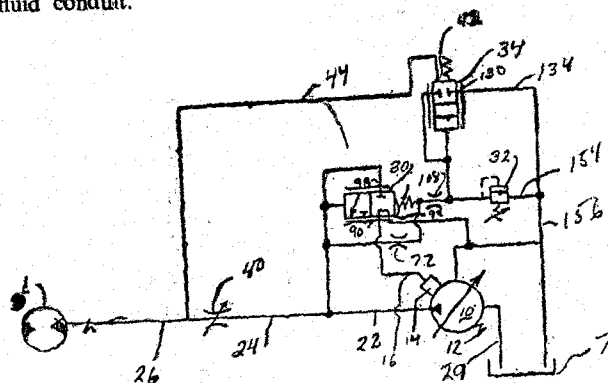
load responsive pressure setting means for said load sensing relief valve;

sixth pilot fluid conduit for connecting said inlet port of said load sensing relief valve to the downstream side of said first control orifice for receipt of pilot fluid therefrom;

wherein said load sensing relief valve is movable between a first position in which said sixth pilot fluid conduit is blocked and a second position in which said sixth fluid con-

duit is connected to case enable said pilot fluid to flow through said first control orifice when the setting of said load responsive pressure setting means of said load sensing relief valve is attained; and

a damping orifice positioned downstream of said control orifice and common to both said fifth and said sixth pilot fluid conduit.



(Comp. 27 pages;

Drwgs. 2 sheets)

Ind. Class : 33 F [XXXIII(3)]

171689

Int. Cl. : B 22 C 9/02.

# **A TWO PART FEEDER PATTERN FOR PRODUCING A METAL CASTING MOULD AND THE METHOD THEREOF.**

Applicant : FOSECO INTERNATIONAL LIMITED A  
BRITISH COMPANY OF 285 LONG ACRE NECHILLS,  
BIRMINGHAM B7 5JR ENGLAND.

Inventors : 1. HELMUT SCHOPP 2. MICHAEL FRIED-  
RICH.

Application No. 692/Mas/90 filed on 30th August 1990.

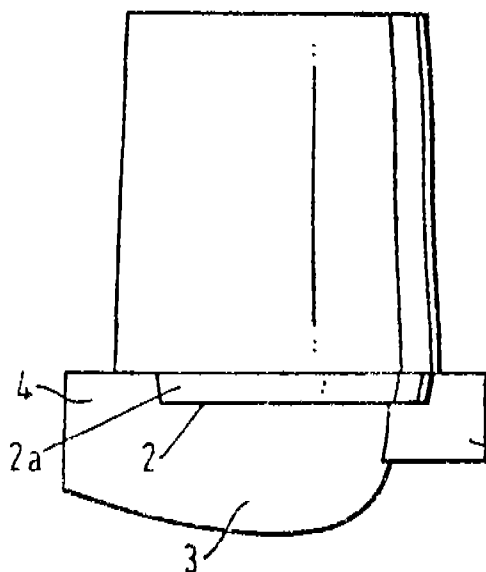
Divisional to Patent application No. 997/Mas/86, Ante-  
dated to 19-12-86.

Appropriate Office for Opposition Proceedings (Rule 4,  
Patents Rules, 1972), Paten Office Branch, Madras.

## **4 Claims**

A two part feeder pattern for producing a metal casting  
mould comprising a cope mould and a drag mould, the

pattern having a lower part with means for locating and centering a feeder sleeve in the drag mould, means for producing in the drag mould a depressed seating surface for a core on which the feeder sleeve is to be seated, and an upper part having a lateral surface which tapers from the bottom end to the top end of the upper part.



(Compl. specn. 24 pages

Drg. 6 sheets)

Ind. Class : 12S-F [GROUP—XIX(2)]

171690

Int. Cl.<sup>4</sup> : A 61 M 5/00.

AN APPARATUS FOR MIXING A LIQUID AND A MEDICAMENT IN A TWO-COMPARTMENT CYLINDRICAL AMPOULE.

Applicant : NOVO NORDISK A/S, A DANISH JOINT-STOCK COMPANY, OF NOVO ALLE, 2880 BAGSVAERD, DENMARK.

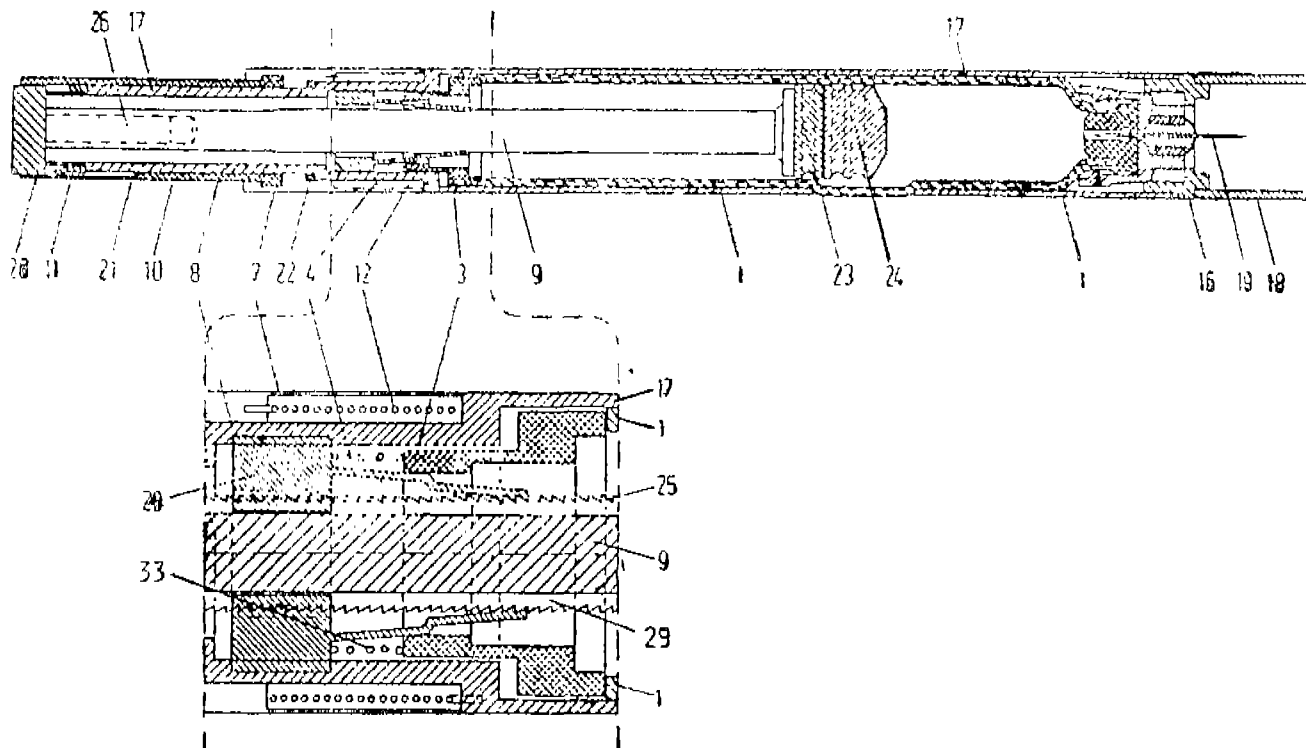
Inventor : FRITE BONNICHSEN.

Application No. 39/Mas/91 filed January 22, 1991.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

# 8 Claims

An apparatus for mixing a liquid and a medicament in a two-compartment cylindrical ampoule after this ampoule has been positioned in a syringe for dosed injection of the mixed product, the ampoule comprising a front chamber containing the medicament and being at its front and delimited by a membrane closing the front end of the ampoule and being at its rear end closed by a first displaceable piston, and a rear chamber containing the liquid and being at its front end delimited by the first displaceable piston and being at its rear end delimited by a second displaceable piston at the rear end of the ampoule, and a passage between the two chambers, which passage may be opened by a joint displacement of the first and the second piston and the liquid between them in a direction toward the front end of the ampoule, whereafter a further displacement of the second piston presses the liquid through the passage for mixing with the medicament, wherein it comprises a housing (17) which may be opened at its front end for inserting a two-compartment cylinder ampoule (1), a piston rod (9) which is displaceable in its longitudinal direction and pressed out through the rear end of the housing when the ampoule (1) is inserted and which passes forward to actuate the rear piston (23) of the ampoule (1) for mixing the medicament and the liquid and for subsequent injection of the mixture, when the ampoule (1) has been secured in the housing (17) by mounting on the front end of the housing (17) a screw stopper (16) carrying a needle (19) for penetrating the membrane of the ampoule (1).



(Comp. specn. 15 pages

Drgs. 2 sheets)

## PRINTED SPECIFICATION PUBLISHED

Patents No.

Date

A limited number of printed copies of the undernoted specification are available for sale from the Patent Office, Calcutta, and its branches at Bombay, Madras, and Delhi at two rupees per copy :—

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Cal—18, Del—09, Mas—09 &amp; Bom—01.

\*Patent shall be deemed to be endorsed with the words "LICENCE OF RIGHT" under Section 87 of the Patents Act, 1970 from the date of expiration of three years from the date of sealing.

D—DRUG PATENT, F—FOOD PATENT.

## AMENDMENT PROCEEDING UNDER SECTION 57

The amendments proposed by SEPRACOR, INC. in respect of Patent Application No. 166947 (205/Mas/88) as advertised in Part III, Section 2, of the Gazette of India on 9-5-1992 and no Opposition being filed within the stipulated period, the said amendments have been allowed.

The amendments proposed by STERIMATIC HOLDING LIMITED, in respect of Patent Application No. 170152 (766/Mas/87) as advertised in Part III, Section 2 of the Gazette of India on 7-3-92 and no opposition being filed within the stipulated period the said amendments have been allowed.

The amendments proposed by TAKEDA CHEMICAL INDUSTRIES, LTD., in respect of Patent Application No. 769/Mas/89 (170284) as advertised in Part III, Section 2 of the Gazette of India on 16-5-1992 and no opposition being filed within the stipulated period, the said amendments have been allowed.

Endorsement of Patents with the words "LICENCE OF RIGHT" under Section 87 of the Patents Act, 1970.

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## CESSATION OF PATENTS

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## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of the registration of the design included in the entry:

Class 1. No. 164301. Reliable Metal Works, 43-1 RS Nimkar Marg, (Foras Road), Baghdad Compound, Bombay-400008, Maharashtra, India. "Chakhdi". April 28, 1992.

Class 3. No. 164147. Milton Plastics, Indian Partnership Firm of 202/203, Raheja Centre, 214, Nariman Point, Bombay-400021, Maharashtra, India. "Flack". March 9, 1992.

Class 3. No. 164241. Shah Engineering, Dayasagar, Bhayandar (E), Dist. Thane, 401105, Maharashtra, India. "Compass with attachment". April 10, 1992.

Class 3. No. 164242. Shah Engineering, Dayasagar, Bhayandar (E), D'st. Thane, 401105, Maharashtra, India. "Compass with pen holder". April 10, 1992.

Class 3. No. 164521. Cosmic Traffic Systems Pvt. Ltd. of 5, Anjali Apartments, Ramkrishna Mission Marg, 14B Road, Khar (West) Bombay-400052, Maharashtra, India, Indian Company. "Traffic Directional Bollard". July 8, 1992.

Class 3. No. 164555. Samrat International Pvt. Ltd. of Malhotra House, 4th floor, Opp. G.P.O. Bombay-400001, Maharashtra, India, Indian Company. "Razor". July 17, 1992.

Class 3. No. 164556. Shaileshco Industries of 38 Sidco Industrial Estate, Kurichi, Coimbatore-641021, T.N., India, Indian Company. "Splash out toy ball". July 20, 1992.

Class 5. No. 164303. Sara Lee Corporation of 470, Hanes Mill Road, Winston-Salem, North Carolina-27105, U.S.A. "Package". April 28, 1992.

Class 13. No. 164235. Indore Fabricators of 570, Kalani Nagar, Indore-452002, M.P., India, Proprietary Firm. "Mosquito Net". April 6, 1992.

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Nos. 150150 & 157852 Class 1.

Nos. 158857, 160502, 163473 & 158771 Class 3.

R. A. A. CHARYA  
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